# Clinical Lecture
ON
# WOUND TREATMENT,
## BY DRY AND INFREQUENT DRESSING, REST, AND PRESSURE.

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GENTLEMEN,—The majority of wounds heal rapidly and painlessly under dry and infrequent dressing, uniform gentle pressure, and absolute rest. As a simple illustration you have before you F. H——, a butcher, aged thirty, admitted into the Queen's Hospital on October 31st, 1878. While sticking a sheep, shortly before admission, he inflicted a wound over the inner side of the knee. It was nearly three inches long, and down to, but did not penetrate, the joint. The edges were accurately brought together with four silver sutures, a gauze and oakum pad was placed over the wound, the limb enveloped in cotton wool sufficiently to protect the bony prominences, and immobilised with lateral and posterior moistened pasteboard splints from foot to hip. A gently compressing bandage completed the dressing. Absolute rest was enjoined. The man felt nothing of the wound, and it was not looked at until the seventh day, when it was healed; the stitches were removed, and the same dry compressing apparatus applied until the fourteenth day, when the patient was discharged with a perfectly sound cicatrix.

Here is a similar case, but of a more serious nature, treated in precisely the same manner, and with equally good result. D. B——, a labourer, aged twenty-one, was admitted to Ward 1 on Nov. 9th, with a punctured and contused wound just on the inner side of the upper margin of the right patella. The wound was round and jagged, capable of admitting the tip of the index-finger, and extended obliquely a little more than an inch in depth over the condyle. No hæmorrhage or synovia. The whole knee felt hot, and looked puffy. Accurate measurements, at the upper and lower margins of both patellæ, proved the circumference on the injured side to be half an inch more than on the left. The man's statement was that, about an hour before admission, while breaking up a macadamised road by driving into it with a sledge hammer a steel bar weighing about ten pounds, the latter recoiled, and struck him with the point (which had just before been tempered,) on the right knee. He walked half a mile to a cab, in which he rode to the hospital. A pledget of lint soaked in styptic colloid was placed over the wound, over it a dry gauze and tenax pad, and the limb, enveloped in cotton wool, was immobilised from the toes to the hip with pasteboard splints and compressing bandage. The temperature, which on the evening of admission was 100°, rose in twenty-four hours to 102°. The evening of the second day it fell to 100·5°; the next day to normal, at which it has remained with trivial deviation. When the temperature was at its highest (the second day) the man complained of some pain in the knee; it was not touched, but an ounce of castor oil prescribed and a close watch kept. The temperature falling steadily, and the man becoming easier, it was not until the sixth day after admission that the apparatus was opened; the swelling had then all subsided; the skin was of natural colour, and about half a drachm of pus was, with a pledget of lint, wiped off the wound, which was contracted and granulating; dry gauze and oakum pad was placed over the wound, and the same immovable compressing apparatus reapplied. At the second dressing (Nov. 21st, twelfth day after admission) the note is: "Trace of pus; wound nearly healed." At the third dressing on Nov. 26th (seventeenth day) I made this note: "On opening apparatus, dressing perfectly dry, cicatrix solid and painless; no surrounding redness or swelling." I may incidentally remark that, apart from the wound, the swelling which rapidly invaded the knee after the very violent blow could not have been treated so successfully by any other method as by perfect immobilisation and gentle uniform compression. Before dismissing this case, let me call your attention on this, the twentieth day after the injury, to the healthy appearance and free movement of the joint.

The next case of wound of the knee-joint is of older date,[1] but I had not seen the patient for some months until yesterday, and the nature and treatment of the injury now admits of profitable review.

George T——, aged forty-eight, was admitted into the Queen's Hospital on July 20th, 1877. A short time previously, while trying the temper of a double-handled drawing-knife on a piece of ash, his left knee being bent at the time, the knife slipped, completely dividing the tendon of the quadriceps extensor cruris; the intercondyloid space was exposed, and a finger could be passed underneath the patella. I brought the edges accurately together with there points of silver suture and strips of lint soaked in styptic colloid; over these oakum and cotton-wool. The limb was immobilised in the extended position by lateral and posterior pasteboard splints and a compressing bandage; the outside of the latter was starched, and heavy sandbags placed along each side of the limb. There was neither pain nor rise of temperature. I did not expose the wound until the ninth day; healing was then perfect, the skin pale and shrivelled; the same dressing reapplied. The sutures were not removed until the eleventh day. The man was discharged on the thirtieth day after admission, the apparatus having been opened four times in the interval. The linear scar is now only just visible, the knee can be bent at an acute angle, the limb is as strong as its fellow, and the man walks without a limp.

Here is a case of extensive contused and lacerated wound of the head, treated on identical principles and with equal freedom from pain and constitutional disturbance.

S. B——, aged fifteen, was admitted to Ward 3 on the 21st of November last. The following note was made at the time by our house-surgeon, Mr. Jordan Lloyd, to whom I take this opportunity of expressing my indebtedness for his most intelligent and painstaking assistance. Shortly before admission "S. B—— was knocked down by a cart, the wheel of which struck him on the right side of the head. On admission there was some shock; a contused ragged wound full of grit began about three-eighths of an inch in front of the right tragus, and extended from just below the lobule to a little above the upper margin of the pinna; it passed backwards so as nearly to sever the ear from the head, completely dividing the external auditory meatus about half an inch from its orifice. There was considerable contusion in the temporal region about the jaws and around the eye." After lightly wiping clean the wounded surface with dry pledgets of lint, the lips of the wound were brought together by three silver sutures, a drainage-tube was passed

into the lower angle of the wound, and a soft gauze and stypium pad placed round the back of the ear, so as to give the pinna true and sufficient support. Over the ear, the wound, and the right temporal region, was placed a pad of

[1] Gamgee on the Treatment of Wounds, p. 36. London: J. and A. Churchill. 1878

gauze and dry stypium covered by a layer of cotton-wool; the whole firmly secured by a gently compressing bandage.—Nov. 22nd (day after admission): After a comfortable night, has been sick, and complains of headache. Temperature 102; pulse 120; respiration 34. To have an ounce of castor oil; milk diet. No tension felt through the dressings, which remain untouched. The temperature fell two degrees in twenty-four hours, and stood at health on the morning of Nov. 25th (fourth day), with pulse 104, respiration 24. In two days more the pulse was 84, respiration 22.—28th (seventh day): Wound dressed for the first time. The dry gauze pad peels off very readily, showing pale skin and a united wound. A few drops of matter collected in the concha, wiped out with dry lint. Drainage-tube and sutures removed. The pad behind the ear not interfered with. The edges of the wound supported with a couple of strips of elemi plaster, and the dressing completed with dry stypium pad, cotton-wool, and compressing bandage. — Dec. 1st (tenth day): Has been up in the ward for several hours. Says he feels quite well. Meat diet.—The patient was discharged on Dec. 11th, and the appearance of the cicatrix on Dec. 13th (the twenty-second day after the accident) is faithfully represented by the accompanying engraving, from a photograph taken with the electric light by Mr. Simpson.

I shall now briefly call your attention to the two cases in which I excised the right elbow-joints on the 23rd ult., treating the one strictly on Professor Lister's plan, the other by dry dressing, gentle pressure, and absolute rest. I had at first intended to draw lots as to which case should be treated on one plan rather than the other; but as in one case the skin was unbroken, and in the other a sinus led down to a suppurating joint, I took this case for the dry dressing, as its condition is not looked upon as a favourable one for the antiseptic method. The suppurating case was in another particular the more unfavourable one of the two, as its subject is altogether a weaker man. This patient's temperature stood at 98° the evening before the operation; of the pulse and respiration at the same time I regret that we have no record. The stronger man, who was afterwards treated with the carbolic spray, had a temperature on the eve of the operation of 98·4°, the pulse at the same time being 84 and the respiration 20. On the morning of Nov. 23rd, I excised both elbows, making in each case one longitudinal incision. The state of the parts admitted of my removing, as nearly as possible, the same amount of the three bones in both cases. In the dry case I carefully abstained from wetting the wound, and lightly brushed its surface with styptic colloid after twisting one vessel. Five points of silver suture accurately approximated the edges, except in the centre, where a gap was left for a loop of drainage-tube, which passed through it, and the opening on the radial side which had led into the joint before operation. The dressing consisted in strips of lint soaked in styptic colloid applied so as to assist the stitches; a gauze and oakum pad outside the joint; a covering of cotton wool, half an inch thick, over the whole limb, which was immobilised in the straight position by means of moist pasteboard splints extending from the tips of the fingers to the shoulder, and moulded to the limb under a gently compressing bandage; dry pasteboard splints were then lightly fixed externally.

In the case treated according to Professor Lister's plan the utmost care had been taken to carry out his teaching so far as we know it. The limb was well cleansed with carbolic water before and after the application of Esmarch's bandage; the assistants and myself thoroughly washed our hands with soap and then with carbolic water; the latter was freely used in cleansing the sponges and soaking the instruments;[2] the steam spray acted well; the protective gauze dressings and bandages were all perfectly carbolised and applied with the utmost care. In this case four vessels were secured with carbolised catgut; five silver sutures were used to approximate the edges, except in the centre, where a gap was left for a carbolised drainage-tube, the same thickness as that employed in the dry case, but shorter, as there was no sinus on the outer aspect of this joint. The carbolic case was dressed whenever permeation was observed through the dressings, which was daily for the first few days. The dry case was dressed the first time at the commencement of the fourth day after the operation, when four-fifths of the wound were found healed and four sutures removed. Two days afterwards the patient had some bleeding from the nose, and some venous oozing through the dressings over the seat of operation. On removing the apparatus I found the wound looked well, and the oozing could not have exceeded two ounces. The same kind of dressing was reapplied. Three days later (Dec. 23rd, tenth day after operation) some bright-red blood was seen to have permeated the dressings, which Mr. Lloyd removed. Finding that the wound looked well and the hæmorrhage had ceased, he surrounded the elbow with pads of dry lint, and bandaged the same splints over cotton wool, with somewhat firmer pressure than before. After the previous attack of venous oozing, the limb had been placed on an inclined plane with the hand raised. After the second hæmorrhage the hand was still further raised. Please to bear in mind that this patient was from the first the weaker of the two; his elbow-joint had suppurated; and, since the operation, not only has he had bleeding once from the nose and twice from the arm, but he has been troubled with obstinate constipation; yet his temperature and pulse have throughout been lower. Only last evening did the temperature of both stand exactly at the same level—98·4°. The pulses, however, differed: that of the dry rest case was 76; that of the carbolic spray case 106.

Accurate notes have of course been kept, and will in due course be published; for the present I shall only summarise, in a tabular form, the records of temperature, pulse, and respiration, up to last night—seven hours after the completion of the tenth day from the time of operation.

| | | Nov. 24. | Nov. 27. | Nov. 30. | Dec. 3. |
|---|---|---|---|---|---|
| Dry rest case | Temp. | 102·5° | 98·5° | 98·4° | 98·4° |
| | Pulse | 96 | 80 | 84 | 76 |
| | Resp. | 34 | 24 | 24 | 26 |
| Carbolic-spray case | Temp. | 103° | 102 | 99·5° | 98·4° |
| | Pulse | 120 | 108 | 88 | 106 |
| | Resp. | 30 | 24 | 22 | 22 |

Whatever the issue of these two cases,[3] it is needless to say that it will be no answer to the question which of the two plans of treatment is the best. While presenting many points of similarity, the cases locally and constitutionally are very different. Even if they were as nearly identical as it is possible for the same disease to be in two individuals, the comparison made would be chiefly of value as one illustration offering suggestions and pointing out the direction for future clinical inquiry. With these reservations, I feel at liberty to call your attention to one distinctive feature of the two cases which was very striking in the first week of their course.

Although the dry rest man is nervous and comparatively feeble, he was in comfort by day and had good sleeps at night, while his more plucky companion suffered a great deal of pain in the arm, greatly intensified at each dressing. The hand and forearm of the former have all along been pale, cool, and shrivelled; of the latter puffy, pink, and shining, during several days.

In dressing cases of psoas abscess, empyema, or ovarian section with the carbolic spray and its accessories, the position of the patient on the back admits of the process being repeated with comparative ease and painlessness. But here are three other cases—one of excision of the elbow, a second of amputation below the knee, and a third of disarticulation at the hip. A system of treatment which requires that whenever discharge is seen to come through the dressings, these are to be changed under the carbolic spray, is opposed to the great principle of local and constitutional rest, subjecting the patient to a great deal of pain and the surgeon to a great deal of trouble. We are told that the necessity for such change of dressings, when permeation occurs, is obligatory as a condition precedent to perfect

[2] The carbolised water in the bowls, for hand and sponge washing, was of the strength of 1 in 50; in the spray, 1 in 25.

[3] While correcting this proof, I beg leave to add a later record of the two cases. At 11.30 A.M., Dec. 15th (the commencement of the twenty-second day after operation), I made this note:—

| | Temp. | Pulse. | Resp. |
|---|---|---|---|
| Dry case | 98·2 | 76 | 19 |
| Spray case | 98·6 | 87 | 20 |

On dressing both cases at the same time, we find in the carbolic case about thirty drops of perfectly odourless pus next the wound, which is granulating throughout. The protective is not at all discoloured. A slight opening, through which a drop of pus exudes, has formed on the outer side of the elbow, which admits of motion with very little pain. On removing dressings from the dry case, they are quite dry, emitting a faint odour as of half-cured fish. The old sinus opening on the outer side of the elbow is all but closed, and the cicatrix is quite solid for about three-fourths of its length. The elbow can be flexed and extended without any pain. This man has had no recurrence of bleeding. Both patients have walked about for some days with the elbows at right angles, supported in efficient slings.

asepticity. Let the germs touch the discharge, and the chain of putrefactive causation is established between the outer world and the external wound.

By the courtesy of the Council of the Midland Medical Society, the students of this school were privileged to hear the deeply thoughtful and richly instructive address which Prof. Lister lately delivered here. His title, you will remember, was "On the Healing of Wounds without Antiseptic Treatment." I shall only recall to you one passage which I took down *verbatim*, as my distinguished friend and old fellow-student was endeavouring to explain some of the published results of my practice. He did not question the reported recoveries after wounds into joints, and amputations under dry and infrequent dressing, rest, and pressure. Here is the pith of his answer—"that the healthy living tissues have the power of preventing the development of bacteria in their vicinity." This admission goes a very long way towards solving the question at issue. Since the great majority of wounds, whether inflicted by accident or by the surgeon's knife, are in healthy tissues, the development of bacteria need not be feared. Life resists putrefaction. Administer economically, preserve and utilise the resources of life, and you will have the benefit of its power in your surgical work. You will secure nutrition and repair, and, under the circumstances mentioned, have very little need to wage a war of extermination against atmospheric dust. But all wounds are not into healthy tissues—to wit, an incision into a joint filled with pus, an opening into a psoas abscess, or an empyema. It is in these cases that the argument of the germ-theory is full of suggestiveness; it is in these cases, not improbably, that a special triumph will be reserved for Professor Lister's treatment. If so, the triumph will be a grand and glorious one. I for one shall most heartily congratulate my distinguished friend, if experience prove the superiority of his plan of treatment in the exceptional pathological conditions just referred to. But for the great mass of surgical cases, for the treatment of wounds in every-day life and in the workshop, at the pit's mouth and on the battle-field, the requisite knowledge is old and sound. Much of that knowledge has never been sufficiently appreciated; no small part of it has been forgotten. The work of collecting and digesting scattered information, of applying a combination of therapeutic resources, separately valuable, and collectively most powerful for good, is an investigation at once deep and intricate; it demands no less learning than practical skill, and can only be successfully mastered by the combined energies of a number of men. Let anyone read Liston and Syme, living teachers of the other day, in the very first rank of historic surgeons; then let him think of the present discussion on wound treatment. They thought water dressing of recent wounds perfection; many of us look upon it, as I do, as an abomination. Treating of sprains, Liston said, "Avoid such compression as may interfere with swelling from effusion, which is *a salutary process, and should be encouraged, and not repressed.*" We say compress, and you will have no effusion, which is a pathological process to be discouraged and repressed, whether the swelling attend a sprain or a compound fracture, whether it be bloody or inflammatory, beneath an unbroken skin or associated with a wound. Are these truths or errors? *Experientia docet.* Let me repeat to you my favourite quotation from the inexhaustible treasure-house of the old French Academy of Surgery: "*L'Académie n'aime pas les systèmes.*" Theories and systems are what you have to avoid. Facts and their strict interpretation are what we have to search after. It is in this search that we are engaged. It is in this search that all those surgeons who are diligently working out the problem of wound treatment are destined to find a reward which cannot fail to redound to the honour of our art and to the good of our race.

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BEQUESTS ETC. TO MEDICAL CHARITIES.—The City of London Hospital for Diseases of the Chest has become entitled to £100 under the will of Mrs. Eliza Devaux, of Mare-street, Hackney. The Grocers' Company have given £100 to the North-Eastern Hospital for Children, Hackney-road. The Gloucester Infirmary has received £200 under the will of Miss Elizabeth Kimberly. Miss Jane Gregory, of Stroud, bequeathed £1500 to the Stroud General Hospital, £1500 to the Gloucester Infirmary, £1000 to the Cheltenham General Hospital, and £1000 to the Gloucester Lunatic Asylum. Lord Overstone has given another £100 to the Charing-cross Hospital. The Grocers' Company have given £30 to the Hospital for Women, Soho-square.

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SOME NOTES ON

# ABSCESS OF THE LIVER,

ILLUSTRATED BY CASES IN WHICH THE ABSCESS HAS BEEN SUCCESSFULLY OPENED WITH TROCAR AND CANNULA.

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*(Concluded from page 838.)*

FROM the six cases narrated, it will be seen that puncturing the liver with a trocar and cannula, after first making an incision with a scalpel to facilitate their introduction, is a simple and safe proceeding. I have come from experience to prefer this method to using the aspirator. I will give my reasons for so doing; but in the first place it is fair to state that I have no sort of prejudice against the pneumatic aspirator; rather should I be an advocate on its side, for I was the first medical officer who introduced it into India, and recommended its adoption.[1] I saw Professor Maclean use it at Netley shortly after its introduction there, and on my return carried one out to India, and brought it to the notice of Dr. Mackenzie, our then Surgeon-General, who persuaded Government to send for some. My reasons for deserting the aspirator, founded on unsatisfactory results, are simply these: If we look at the abscesses in our pathological museums (this is very well shown in the collection of the Madras Medical College Museum, and even better in recent cases in the post-mortem-room), we observe that the abscess proper, in by far the majority of cases, is shut off, as it were, from the rest of the liver substance by a membrane more or less thick. In some abscesses of long standing, quiet abscesses, the membrane is like a piece of tough doe-skin leather, such as gloves are made of; in recent cases it is thin, like the membrane lining an egg-shell, or a thin piece of overland letter paper. This membrane is the product of Nature's effort to localise the mischief, and cut off the abscess from the living tissues of the liver—the "limiting membrane," if we may so call it. Now the last draught of the aspirator is very apt to break this down or tear it away, and thus not only lay bare the healthy liver-tissue, to absorb pus and bring about pyæmia, but, if I am not mistaken, to cause a sort of hæmorrhage or oozing from the liver itself at the time into the cavity of the abscess. Often have I seen in the last traction of the aspirator, not only pus, but blood, and a thick red fluid, looking like broken-down liver tissue, flow into the bottle. These cases almost invariably die. The simply tapping with a trocar, and allowing the abscess to empty itself, certainly avoids this.

In nearly all cases when an abscess is tapped and any considerable amount of pus extracted by an aspirator, even when enormous relief is given—and on that point, that great relief is given, there can be no doubt,—it is found the abscess fills again and again; in fact, it must do so, for it is difficult to imagine what else can take place in a large hollow thus created in a tolerably unyielding viscus like the liver. And it is found, at least such is my experience, borne out also by the careful study of all the cases I have been able to find, which are described at length, that on the next tapping the pus is less laudable, more serous, thin, and often sanious. The abscess is tapped again and again, with relief, but there is no actual progress towards recovery as far as the patient is concerned. This has been my experience in several instances, and is well shown in Case 5 of Surgeon-Major Condon's admirable paper in THE LANCET of August 25th, 1877, where, as he says, upwards of 400 ounces were from time to time extracted, with ultimately a fatal result.[2] It is also well shown in a case given in the *Madras Quarterly Journal of Medicine*, vol. ii., 1873, where, although the instrument used is not precisely stated—there can be no doubt it was the aspirator,—the enormous amount of 430 ounces of pus was from time to time with-

[1] Vide Madras Quarterly Journal for 1870.

[2] There is a remarkable exception to this in a case detailed in the "Indian Medical Gazette" for June, 1878, when thirty ounces were drawn off at one sitting and aspiration never repeated. The man, a native, completely recovered.

drawn. At last, Nature seems in this case to have rebelled and the wound refused to heal, and then the abscess drained gradually and dried up, and the patient recovered. If the abscess is a little one, containing a small quantity of thick pus only, the same unfortunate sequence of things does not necessarily take place. Here often the aspirator is efficacious.

Again, the abscess should not be squeezed or pressed to empty its contents. All old authors are strong on this point. Dr. Jackson, formerly of Calcutta, in some capital practical remarks on abscess of the liver (THE LANCET, August 13th, 1859), says, *apropos* of puncturing abscesses of the liver, "The opening should be small and matter allowed to exude without *any amount of pressure*." Annesley deprecates pressure. Dr. Morehead also is strong on emptying "without pressure." In my student days, in St. Bartholomew's Hospital, it was a golden rule not to squeeze or forcibly press out the contents of an abscess. I can almost imagine at this distance of time I hear the veteran Stanley: "Don't squeeze it, squire! let it alone, it will empty itself." What does the aspirator do? Its powerful suction far exceeds any pressure one could bring to bear on an hepatic abscess. By its traction it makes the surrounding parts, if I may so say, squeeze very hard.

Nor does the aspirator always successfully exclude air, which is one of its chief recommendations. Indeed, unless the operator has carefully rehearsed his lesson beforehand—and one is not always tapping liver abscesses,—the aspirator is a very ingenious apparatus for admitting a good deal of air into a cavity admirably prepared for its reception. In Case 5 of Dr. Condon's, already quoted, that accident is graphically described as having occurred: "My finger slipped off the hole by accident, and air rushed in with a whiz." I have seen this occur more than once, although in recorded cases Dr. Condon is the only writer who candidly relates it. If the abscess is carefully opened under the antiseptic spray with an incision followed by the trocar, and before the cannula is withdrawn, carbolised lint introduced, and, moreover, no pressure whatever is made, it is almost impossible for air to enter. I have never found it to occur—at any rate, I have never seen any unfavourable evidence of its having occurred. In fact, you imitate as nearly as possible Nature's plan—"a small opening, and the abscess allowed to drain away gradually." Dr. Lowe puts it graphically[3] in his objection to operative proceedings: "When the operator is entirely left to Nature, small worm-eaten-like openings serve to discharge the pus, so that it has a slow but constant escape. As these apertures never close up, and as the matter is always oozing out, air cannot enter, no decomposition takes place (no septicæmia occurs), no secondary fever sets in; the patient feels no shock from the loss of matter which escapes so gradually, and as it escapes "*so Nature closes up the wall of the sac.*" All this is possible if the abscess is opened by a small opening and allowed to drain away gradually; in fact, we are imitating and assisting Nature only. If the abscess is forcibly emptied by an aspirator, we are, it seems to me, doing violence to her.

Then why not wait on Nature altogether? it may be reasoned. Dr. Murchison has very admirably answered this: "To wait in these cases upon Nature, as it is called, is to wait upon death." No doubt of it. From the time I first contemplated the soldier in the post-mortem room, to which I made allusion in the commencement of this paper, to the present time, I can recall with sorrow many a case under my care and the care of others which has been allowed to die with abscess, or presumed abscess, unopened. But I cannot recall a single case where I have regretted having punctured. My only regret is that I ever deserted the trocar and the cannula for the aspirator. I have not lost a case with the trocar and cannula; several with the aspirator. A look at the chart of Case 4 (see page 838) will show very markedly the advantages of opening an abscess of the liver, and not waiting upon Nature. The great majority of patients with abscess of the liver, if not relieved, die of exhaustion from hectic fever or diarrhœa. As Dr. Cameron[4] says, "It is a duel between hectic fever and an enfeebled constitution, and few survive the combat." Neutrality, so much the fashion nowadays, is here misplaced; armed intervention with a bistoury, trocar, and cannula is the correct proceeding. Nor need we, I think, hold our hand because the patient is too far gone. It is almost impossible to say when this state has arrived. In case No. 2, the man with a pulse of 130, very small volume, tongue brown and dry, &c., lived to go to work again. In Case 5 the patient was very bad, so bad his medical attendants did not like to put him on board ship, and certainly he himself never expected to recover; but he is now playing cricket in the green fields, Gloucestershire, instead of enriching the plains of Hindustan with his bones.

Again, in THE LANCET of July 12th, 1873, will be found a case by Dr. Maclean, which shows very conclusively we should never despair, but invariably give our patient this chance. One thing, *he is sure to die* if you do not puncture. That puncturing the liver, if even pus be not found, is not a dangerous proceeding, must now, I think, be freely admitted. In Dr. Condon's paper there are no less than six cases quoted, in which the liver was explored by the needle and no pus found, but great and immediate relief given to the patients. In one case (No. 6), where the gentleman had very serious and very natural objections to having his liver "poked up" as he calls it, he becomes, after one experiment, not only a convert, but an ardent admirer of the practice.[5] But the most satisfactory witness is Professor Maclean, at one time, if I mistake not, a most determined opponent of indiscriminate prospecting. In THE LANCET of July 12th, 1873, already quoted, he has no less than three cases wherein he punctured the liver without finding pus, but gave the patient immediate relief. The testimony of so experienced and careful an observer is most valuable. Dr. Waring gives several instances, and I find in some seventy odd cases of livers opened for abscess, which I have been able to collect, as having occurred since Dr. Waring's invaluable little work was written, many similar instances. It is an old Indian and Chinese practice to puncture both the liver and spleen, and even Hippocrates recommends it.[6]

Dr. Murchison, in his otherwise most valuable treatise on the liver, recommends the cannula to be "tied in for two or three days," and this apparently was the course pursued by the old practitioners. Few proceedings seem to me more calculated to bring about an unfavourable result: a hard, unyielding piece of metal in a sore and often inflamed organ, an active cause of irritation, bathed in pus, and thus rapidly causing that peculiar change and decomposition which liver pus in contact with metal undergoes, and a more or less patent orifice to conduct air into the cavity of the abscess! In effect, death supervenes in nearly all the cases where it is definitely stated the cannula was left in the wound. Thus in Waring's eighty-one cases of operation, in nine we are distinctly informed the cannula was left in the wound after operation; of these seven died. In Annesley's cases all those in which the cannula was left in proved fatal; in his two successful cases the cannula was withdrawn after operation, and the wound stuffed with lint. No wonder the cannula thus used fell into disrepute.

All authors are agreed on the comparative danger of puncturing an abscess which points in an intercostal space. The parts do not contract, and the objection raised by Mr. Lowe, "that air invariably enters, and the renewal of inflammation and fever may end in gangrene," holds pretty well of puncture made here. The first case in which I used the aspirator was on a European in 1870. The abscess was punctured in an intercostal space; the relief given was immense I remember, and we were all very sanguine of the result; but the abscess filled again and again, and had to be repeatedly emptied, until at last caries of a rib set in, the parts around sloughed, and the man died.

In the sixteen fatal cases given by Morehead, in five it is distinctly stated the abscess was opened between the ribs, and in all these gangrene set in. In most of the others it is not mentioned where the opening was made. In the summary of eighty-one cases in which the contents of the liver were evacuated by operation, given in Dr. Waring's book, I find in eight cases it is clearly mentioned that the puncture was made in an intercostal space. All these proved fatal. But I think it would be erroneous to infer death took place simply because the abscess pointed and was opened there. There are other factors at work—depressed vital powers from previous bleedings, mercury, &c.; but some of the old cases did recover in spite of bleeding and mercury, when the

[3] Aitken, p. 906.
[4] THE LANCET, June 6th, 1863.

[5] In the London Medical Gazette for January, 1846, quoted in Ranking's Abstracts, vol. iii., 1846, will be found a very interesting case of a man having a large piece of his liver, which protruded from a spear wound, removed without any apparent inconvenience.
[6] On this subject vide an admirable article in the Medico-Chirurgical Review for July, 1845.

abscess pointed in the free abdominal parietes; so that there can be no doubt that puncturing in an intercostal space, is a dangerous proceeding.

I have a case at the present moment under my charge in which an hepatic abscess has been punctured between the seventh and eighth ribs, somewhat far back on the right side. The man, a native, shows, I am thankful to say, no tendency to death. He is doing well, gaining flesh, and quite free from fever; but the wound will not close; it discharges daily an ounce or two of pus, and a probe can be pushed down its full length into the liver. There is a little button-like excrescence at the mouth of the wound, showing a rib is involved. This will go on probably for months, but, being a native, we shall have no serious constitutional disturbance. It is carefully dressed antiseptically.

To conclude, I will describe at length, for the benefit of junior members of the profession, the steps of the operation I venture to recommend. The part where the incision and puncture are to be made, having been determined upon, is marked with ink. The patient is then propped up in bed, and carefully supported with pillows, bed-rest, &c., in an easy sitting position. It is well to examine and determine the place for incision again now the patient is raised, for it occasionally changes.[7] This being decided on, and *re*marked if necessary, chloroform is administered. The moment the patient is under chloroform, an incision, an inch and a half long, is made over the part marked, cutting down through skin and muscle for half an inch or more—depth of course depending on condition of patient. A grooved exploratory needle, or a fine needle from the aspirator, is now pushed in upwards and backwards, and if pus is indicated on its withdrawal a large-sized trocar and cannula are introduced in its place. The trocar being withdrawn, the pus is allowed to flow out; *the parts around not squeezed or pressed in any manner;* the pus allowed to flow as slowly as it pleases. When pus ceases to flow, a piece of lint, cut so as readily to admit of its passing, and previously well dipped in carbolised oil (1 to 40), is passed down the cannula into the wound in such a manner that when the cannula is withdrawn, which it may be now, the long piece of lint lies half in the abscess and half out. This is simply to keep the wound open and allow the pus ready exit. The reason, however, the lint is introduced *before* the cannula is withdrawn is, that if you withdraw the cannula first, and then attempt to introduce the lint, you will often fail. Why, I cannot well say; something shifts, either muscular fibres or aponeurosis, or what not; but without unwarrantable force or another incision you cannot get it in. Over the wound, with the piece of lint protruding, a piece of soft cotton-wool previously dipped in carbolised oil is placed, and over this a soft bread-and-water poultice, secured with a many-tailed bandage. During the whole time of the operation, which, if everything is carefully prepared beforehand, will not take many minutes, the antiseptic spray is kept going over the parts, and every knife, trocar, probe, &c., is carefully wiped with carbolised oil. In India *it is absolutely necessary* that the medical officer look to every instrument he is about to use himself.

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CLINICAL REMARKS
ON

# TRAUMATIC HERPES.

BY PROFESSOR VERNEUIL,

SURGEON TO THE PITIÉ HOSPITAL, PARIS, AND PROFESSOR OF CLINICAL SURGERY OF THE FACULTY.

GENTLEMEN,—The case about which it is my intention to speak to you to-day is that of a woman, still in her youth, who was operated upon by me for a very large tumour of the breast. The case was one of ramous cyst, with infiltration of the galactophorous canals. The operation was brought to a successful termination, and the patient remained for two whole days without presenting any symptoms worthy of note. On the third day, however, she complained of general malaise and loss of appetite, which had supervened on the second day after the operation. These symptoms were soon followed by vomiting and one or two rigors. The appearance of these symptoms was extremely sudden, and was accompanied by a considerable elevation of the temperature. Upon these indications I immediately examined the wound, and found that it was surrounded by a reddish blush, and the already granulating surface presented a fungous aspect in certain points. In the face of these symptoms it was reasonable to suppose that an invasion of erysipelas was to be feared. But if the general symptoms were those which attend the prodromic stage of erysipelas, the local aspects of the wound did not permit of our thinking of that disease. I consequently diagnosed traumatic herpes of the wound, an affection which I was one of the first to describe in a *mémoire* which I presented to the Société de Biologie in 1873. This diagnosis was amply confirmed shortly afterwards by the appearance of herpes labialis. Our patient thus offered us an example of what I have called local herpes, or herpes of the wound, and herpes at a distance.

The pain, which was very intense at the beginning, soon disappeared, and the temperature fell suddenly. The wound remained for a few days longer in the condition which I have described, and shortly afterwards the curative process continued its course till recovery, without any fresh accident.

The diseases of the granular membrane, one of which you have had the opportunity of witnessing in the case of our patient, have not as yet been studied sufficiently, and it is necessary to fill up this gap.

Many years ago an eminent surgeon, M. Robert, described, under the name of diphtheria of wounds, a complication which he considered wrongly as an attenuated form of "pourriture d'hôpital." This surgeon had been struck with the fact that certain wounds suddenly became extremely painful, fungous in places, and bled easily, and that they were covered over with small superficial ulcerations, forming a complete diphtheroid layer. What one had before the eyes in these cases was that which it is easy to see in herpetic angina, so well described by Trousseau and Gubler. There are ulcerations which generally become covered over by false membranes of a yellowish-white colour, indented and irregularly cut round the edges. M. Robert took special care to point out in his observations the intense pain and the high temperature which accompanied these disorders. Later on I myself studied this complication of wounds, which I then considered as herpes of the granular membrane, and which for that reason I designated by the name of traumatic herpes.

I must also insist upon these two signs of capital importance in traumatic herpes, the high temperature, and the intensity of the pain. In addition, the aspect of the wound which I have described is sometimes fungous and dotted over with ecchymotic spots, at others the granulations become livid, soft, and puffy, ulcerations are formed, and the wound partakes of a diphtheroid aspect. Every time you see the temperature rise suddenly, accompanied by rigors, whilst the patient complains of intense pain in the immediate vicinity of the wound, you may predict the supervention of local traumatic herpes.

I remember, some years back, the case of a man operated upon for a cancerous growth of the breast. The doctor who had charge of the case came suddenly to tell me that the patient, who had been very well the day before, had suddenly become worse; that he complained of a great deal of pain, and presented a high temperature, without having, however, any swelling of the ganglions. As I did not think that it was likely that the patient was about to have an attack of erysipelas, owing to the fact that he had been operated upon under favourable conditions and at his own home, I said it was probably herpetic fever he was suffering from, and my diagnosis was fully justified shortly afterwards. In this case, as also in the one which we have just considered together, the curative process was not considerably hindered in its progress by the intervention of this complication. Thus, gentlemen, in future you will have to reckon traumatic herpes amongst the number of those complications which may affect wounds, and it may either appear on the granular substance in the immediate neighbourhood of the wound or at a distance.

[7] If, when the patient is raised in the sitting position, the marked swelling where one intended to make an incision, disappears I have hitherto held my hand and postponed operation. I have taken this as a sign that no adhesion had taken place between the liver and abdominal parietes. Such a case occurred to me some three months back, and the case subsequently progressed to recovery without any operative proceedings.

## A CASE IN WHICH THE HYPODERMIC INJECTION OF MORPHIA WAS SUDDENLY DISCONTINUED AFTER ITS USE DAILY IN LARGE DOSES FOR SEVEN YEARS.

BY JAMES BRAITHWAITE, M.D. LOND.,
LECTURER ON DISEASES OF WOMEN AND CHILDREN AT THE LEEDS SCHOOL OF MEDICINE, SURGEON TO THE LEEDS HOSPITAL FOR WOMEN AND CHILDREN.

THE following case I believe to be unique, for I am not aware that anything of the kind is on record, and indeed the resolution necessary to carry out such an experiment can rarely be met with.

Seven years ago I was attending a young married lady on account of a painful affection of the spine. The nature of this was doubtful, but was at the time believed to be inflammatory by Sir James Simpson, Mr. William Hey, and my father, all of whom saw the case. I one day, unfortunately, as the event proved, injected her with morphia hypodermically, and at her request occasionally repeated the dose when the pain was more than usually severe. The patient herself began to use the morphia when from home at a watering-place, and the habit soon became confirmed, and the doses largely increased in strength. The dose she ultimately reached was fourteen grains a day. No bad effect of any kind was produced; she pursued her daily duties, and entered into society, but she was never fit for anything in the morning until she had been injected, and always kept quiet till it was time for her dose. If she had anything extra to do she had an extra injection, and this seemed to impart life and energy. During the four years the morphia was thus used she was occasionally ill, and for everything a little extra morphia was a certain panacea, even for the flooding attending several miscarriages. These were got over with comparatively little loss of blood, and from this I received a hint which I have found of some use in treating abortions, and also in hæmoptysis, which form of hæmorrhage is rapidly and certainly checked by a dose of morphia hypodermically. An increasing difficulty in finding suitable places for injection, owing to the body becoming thinner, led to a strong desire to be free from the tyranny of the habit. The patient was a lady of great force of will, and it was all needed in the struggle. She gradually diminished the dose, till in two years it had been reduced to three quarters of a grain a day. If the diminution was too great, diarrhœa immediately resulted, and the patient could gauge the diminution which the system would tolerate by this symptom. My belief is that if nothing had occurred the morphia would have been got rid of by this gradual process, though very slowly, and with great difficulty. At this period, however, she became pregnant, and any further diminution was found to be impossible.

When six months advanced in pregnancy, in consequence of an injection, a large abscess formed in the lower and inner part of the left thigh, and from this the femoral vein could be traced upwards as a hard cord. This proved so serious, that I asked my friend Mr. Jessop to see the case with me, and I feel that to his unceasing kindness and skill much of the credit of the result is due. The abscess was opened antiseptically, and with great care did well, but erysipelas spread from it as a centre up the thigh and round both hips and the sacral region. The morphia had to be rapidly increased in strength to save her life and also to check the erysipelas, which it appeared to do in a wonderful way, for every fresh recurrence of erysipelas was checked at once by a further increase of the morphia.

She was confined on Feb. 6th, 1877, the erysipelas having barely disappeared. The amount of morphia then taken daily was eight grains. Just a fortnight after her confinement, at her own urgent request and with the concurrence of Mr. Jessop, it was decided that the morphia should be discontinued at once and entirely. She was injected for the last time on the morning of Feb. 20th. We had no facts as to other cases to guide us, except a short note of a somewhat similar case published in an old number of the *Edinburgh Medical Journal*, though not with reference to the use of morphia hypodermically. This, however, as it turned out, led us considerably to under-estimate the seriousness of the illness which would follow. Constant, and indeed incessant, vomiting and purging came on next day. The vomiting occurred about every ten minutes, and consisted of a mucoid fluid tinged with bile. The alvine evacuations were similar in appearance, but darker and more tenacious. On the second day the vomiting and purging still continued, as they had done all night, the stomach rejecting everything, and even a nutrient enema by the bowel coming away at once. Ice, ice and champagne, milk, and lime-water, in very small quantities, were tried in vain. On the fifth morning the stomach retained for a short time a morsel of chicken, with a particle of bread, and about a dessert-spoonful of beer, but this was rejected in half an hour, and appeared to have aggravated the sickness. The stomach retained no food for more than a few minutes, till on the ninth day her life appeared in great danger, so great that I had the syringe ready charged, and urged her to let me inject her to save her life. She, however, was firm in her resolution, and said she would rather die than again become the slave of the morphia. The next day (the tenth) the stomach retained food (a morsel of fish) for a few hours, and after this the improvement was gradual, but certain. The diarrhœa, however, continued more or less, and the stomach would only bear food on one condition—that a very long interval should elapse between each meal. I believe the case would have ended here, but through some over-exertion the erysipelas returned on April 16th, and rapidly spread. This seemed to cause a renewal of all the old sickness and diarrhœa, and these lasted continuously for ten days more distressingly than before, and accompanied with such burning of the throat and mouth as to oblige her to have a wet sponge laid on her lips. After the tenth day improvement gradually, but much more slowly than on the previous occasion, set in; but up to this date (December, 1878) the diarrhœa still remains, and on the least over-exertion becomes aggravated. My impression is that it might have been got rid of long before this by absolute quiet and rest, but unfortunately I have never been able to enforce this, and the diarrhœa has now become so chronic that rest has very little effect upon it. There can be no question, however, that every fresh exertion causes an exacerbation of it.

I conclude from this case that a very gradual diminution of the morphia injected is preferable to a sudden discontinuance of it, and seeing that in two years she had got down from fourteen grains a day to three-quarters of a grain, a gradual diminution is proved perfectly practicable. It is, however, the opinion of this lady that there is a greater totality of suffering, but spread, of course, over a longer period of time. If, however, from any reason (as formation of abscesses), it is discontinued suddenly, the symptoms resulting will be incessant vomiting and diarrhœa. The vomiting will subside in a variable period, and the sooner, the less the stomach is teased with anything. The diarrhœa, however, will continue for a long period, and is best treated by absolute bodily repose. Neither astringents nor enemata of any kind have any effect in checking it; rather the contrary. An enema of thirty grains of chloral hydrate in an ounce of tepid water at bedtime must be excepted, as this was retained, and proved of service on several occasions.

Against the plan of gradual diminution, however, it should be observed that the bad effect on the general health during the two years mentioned was very marked, the patient being rendered more or less an invalid. The opinion of the patient herself is very decided in favour of sudden discontinuance, and, as she is a woman of great ability and intelligence, her opinion is not to be disregarded. I cannot, however, agree with her, as I saw her vomiting every five or ten minutes for several days, both immediately after the discontinuance, and on two subsequent occasions when relapses occurred owing to some exertion, and the diarrhœa continues to the present time, nearly two years from its commencement, and is sometimes very exhausting. It is interesting to note that the large doses of morphia had no effect whatever upon the child, which was lively and active in the womb, and is, and always has been, perfectly strong and healthy.

Leeds.

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MR. WM. HERBERT PACKER, M.R.C.S. Eng., has been presented with a timepiece and a silver pencil-case by the female attendants at the Gloucestershire Lunatic Asylum, and with a handsome writing-desk by the male attendants, on his resigning as assistant medical officer.

# CÆSAREAN SECTION; RECOVERY.

BY SURGEON-MAJOR T. CODY,
BOMBAY MEDICAL SERVICE; ON SPECIAL DUTY, BARODA STATE.

ABOUT 6 o'clock P.M. on the 30th of June I received an urgent message from Dr. Balchunder Krishtna, one of the officers of the State Medical Department under my charge, to the effect that he was then with a case of difficult labour, to which the city midwife had summoned him, and in which he considered Cæsarean section the only operative means of affording relief. I immediately visited the case, and found the woman lodged in a miserable hut in a poor quarter of the city. She had been in labour for three days, but sent for the city midwife, Luxmibhai, for the first time in the afternoon on which I saw her. I found her a stunted, dwarfed, miserable-looking, poor creature, about thirty-six years of age, so emaciated as to appear almost like a living skeleton. She had been bedridden for some time, and was unable to make any use of her lower limbs. She was placed on a cot, supported in the sitting posture by a relative, by which means she was endeavouring to obtain some relief from the pains, which were recurring with force and frequency.

On examination I found the distended abdomen pendulous over the pubis, and digital exploration proved the vaginal passage to be so narrowed in its lateral diameter that one finger only could be introduced. No presentation could be felt, and neither could the os, as the impinging protuberance did not allow the gravid uterus to descend into the pelvic cavity. A very slight examination was sufficient to ascertain that this impingement was from bony deposit, and that it was quite unyielding. It was not a congenital malformation of the pelvis, as the woman had previously given birth to two children without any difficulty, the last birth occurring some ten years ago, the child being now living. There was no difficulty in satisfying myself that Dr. Balchunder was right in his decision, and that delivery by the natural passage was an utter impossibility. This was explained to the relatives, as was also the means of relief proposed—Cæsarean section; and I had it pointed out that it was extremely improbable that the mother, in her emaciated and exhausted condition, could survive, while there was every chance for the child. The husband and relatives, who were Hindoos, were, however, willing to abide the result of the operation, and expressed themselves anxious that I should adopt any measure my own judgment suggested. There was little time to be lost, as the small remnant of vitality still left in the patient seemed fast ebbing away. Dr. Balchunder Krishtna having foreseen the result, had a table ready in the verandah of the hut, which was screened off from the sight of persons passing by an old sheet, and on this, aided by him and Dr. Shumsoodin Suleiman, and by the light of a solitary candle and a small oil lamp—for darkness had set in—I proceeded with the operation.

After chloroform was administered, I took up my position on the right side of the patient, and commenced an incision about two inches above the umbilicus, and to the right side of it, which was carried down to the pubis, dividing in their course the integument and superficial structures. At the upper extremity of this another incision was made, about an inch and a half long, which was carefully deepened till the abdominal cavity was pierced. The forefinger of the left hand was then introduced into the opening, and on this the scalpel was guided down the whole length of the first incision, dividing the abdominal wall in its course. The sides of the wound were carefully held by Drs. Balchunder and Shumsoodin, while I pierced the peritoneum at the upper extremity, and divided it on my finger downwards, as just described. An incision was now made in the uterus, commencing about an inch and a half below that in the abdominal wall, and terminating at the same point inferiorly. This was carefully deepened at the upper extremity for about an inch, till it waa pierced through, when there was a rush of the waters, which caused a pause in the proceedings for a few seconds, the sides of the wound being at the same time steadily supported by my two assistants just named, to prevent as little infiltration as possible into the abdominal cavity. When the waters had escaped, the eft index-finger was passed into the opening, and on it the back of the scalpel was rested, and so pressed down, dividing the wall of the uterus for the whole length of the original incision therein. In the course of operation an artery was divided, which was immediately controlled by Dr. Shumsoodin. The placenta first presented, and on introducing my hand for its removal some slight adhesions were found, which a gentle traction immediately overcame. On withdrawing the placenta, a foot and hand presented, but the latter was put back, and the other foot sought for, which was almost immediately found, and so a full-grown living male infant was delivered. On ascertaining that the child was living, it was handed over to the care of the midwife, Luxmibhai, who was present, and the operation proceeded with. The cavity was carefully sponged out, and then the artery controlled by Dr. Shumsoodin was tied with a silk ligature and the ends cut long. The uterus had now contracted considerably, and four wire sutures were introduced through a portion of its substance, twisted, and the ends cut long. Some protrusion of intestine took place after the uterus had contracted, which was troublesome, but it was put back, and maintained by my assistants while I introduced five wire sutures into the outer wound, through which the ends of those in the uterus and the ligature were left protruding. Some antiseptic dressings were now applied, with a compress and binder, and the operation was over, having lasted altogether about fifteen minutes or under.

The condition of the patient at the close of the operation was most discouraging, as she was almost pulseless and her breathing was scarcely perceptible. She was revived slightly by sprinkling some cold water over the face and holding the ammonia-bottle to the nostrils, and then a little brandy-and-water was administered, which was swallowed with difficulty. I had her now removed to a cot inside the hut, having very little hope she could survive the night, from her extremely exhausted state; and believing that a patient so emaciated and possessed of so little vitality must naturally succumb under the shock of so serious an operation, and from the semiconscious state she was in, I did not think she could possibly rally. My prognosis, however, was, I am happy to say, wrong; for next day she had rallied slightly. There was some oozing from the wound, to which styptics were applied with a beneficial result.

On the second day urine was passed, and pain was complained of at the seat of the wound; there was also some puffiness in the hypogastric region. On the third and fourth days pain and puffiness had increased, breathing was much embarrassed, and for a portion of the latter a distressing hiccough and retching had set in. On the sixth day these symptoms had subsided. Pain still existed, but in a lesser degree. The bowels were moved, but the wound looked unhealthy, and an ichorous offensive discharge issued from it. The next day a severe colicky pain set in, which gave much uneasiness, but subsided at length after the bowels had been freely acted on. The wound from this day began to assume a healthier appearance, and began to heal gradually from the inferior extremity. On the twenty-fourth day all the sutures were removed, and the patient was allowed to sit up. From this day the progress towards recovery was steady and unmarred; and on the 1st August she was pronounced well, the wound having almost healed, and her physical condition being much better that it has been for many a day. The infant from the first progressed favourably, but since a wet-nurse was provided, on the tenth day of its existence, the progress had been most marked, and now it looks strong and chubby.

*Remarks.*—It would render this paper too long to speculate on the probable cause of the bony deposit which rendered delivery by the natural means at this birth an impossibility. All I could gather from the previous history was that about eight years ago, and two subsequent to the birth of her second child, she had an attack of rheumatic fever, and since that time she had gradually sunk into her present emaciated condition. She was stunted in appearance always, but there was no visible deformity; and now I can find nothing abnormal beyond a very short body and an undue expanse of chest. The spinal column is quite normal, and so also seems the pelvis viewed externally. The impingement on the vaginal passage appears to be caused by nodulous growths on the rami of the pubes; but how originated I cannot satisfactorily determine. There was no syphilitic history.

I should be glad to know if any of the readers of THE LANCET have had to perform this operation for a like cause,

or subsequent to a previous delivery by the natural means, as I cannot call to mind ever reading of such a case.

Baroda, Bombay Presidency.

## ON THE MORE EXTENSIVE SPLINTERING OF ONE THAN THE OTHER TABLE, IN CERTAIN FRACTURES OF THE SKULL.

BY GILBERT KIRKER, M.D., M.R.C.S.E.,
LATE OF THE STAFFORD-HOUSE HOSPITAL, ADRIANOPLE.

IT has long been observed that in depressed and punctured fractures of the skull, one table, ordinarily the inner, is more extensively splintered than the other. To account for this occurrence many experiments have been made and various theories brought forward; but, as far as I know, the true explanation has never yet been offered.

Because, in fractures of the skull, the breaking force is always applied to the outside, and rarely also to the inside; and because the more extensive splintering is just as often in the inner and as rarely in the outer table; therefore peculiar conditions have been sought for in the inner to account for it.

When it was believed that this kind of splintering only took place in the inner table, it was said to be due to that plate of bone being more brittle than the outer. It is now, however, known to take place in both; besides, as I shall afterwards show, greater brittleness, instead of accounting for its occurrence, should lead one to expect its *non-occurrence*. It has been accounted for by stating that the force is transmitted to a wider area as the body causing the fracture passes into or through the bone, carrying its substance before it. This theory, while partially explaining its presence in the case of blunt fracturing bodies, fails entirely, as Mr. Erichsen has shown, when the body causing the fracture is sharp, like a nail. Again, by Mr. Erichsen it is considered to be due to "the *direction* of the fracturing force and the loss of the momentum in the breaking body." I am certain, and Mr. Erichsen quotes a case to prove, that the more extensive splintering takes place in the inner table when the breaking body travels inwards, and in the outer when it travels outwards; in other words, the more extensive splintering occurs in the table last affected by the fracturing force. There is also no doubt that the loss of momentum in the breaking body increases the splintering. Still this explanation is incomplete, for it does not account for the possible *non-occurrence* of more extensive splintering of the table last affected in certain cases.

Everyone who has made a post-mortem examination of the head must have noticed that in making the holes in the vault for fastening it to the base, if the part of the bone to be perforated was placed firmly on a board, the awl, in being driven through, caused little splintering of the lamina of bone last penetrated. I have also demonstrated, by shooting bullets through the bones of the skull, that the splintering round the exit opening, by certain arrangements, can be diminished, and I believe could be prevented altogether if the arrangements were perfect. Thus, I took the two parietal bones of a skull: for one I carved out a bed in a thick board to fit its convex side, retaining it in its place, and filling up the spaces between the bone and the wood, with plaster-of-Paris; and the other I secured in a hole which went completely through another board. I then shot a pistol, from the same distance, at the concave side of each. Through the first the bullet did not pass, but embedded itself in the bone, raising four little splinters where it would have emerged, and opposite to which the plaster-of-Paris and wood had yielded. Through the second the bullet passed, shelving the circumference of the exit-opening, by carrying away small splinters, making large splinters more externally, and fissuring the bone. I then thought I could still lessen the splintering round the exit-opening if I substituted bone for the wood and plaster-of-Paris. For this purpose I took two pieces of parietal bones; by filing fitted (as accurately as I could) the convexity of one into the concavity of the other, and fastened them together by wooden pegs. Through these I shot a bullet, again aiming at the concave side. The result in this case was more satisfactory, for the exit-opening in the one first penetrated was very little splintered, its circumference being only partially shelved round. The little splintering present was due to the inequalities between the opposed surfaces of the bones. It is impossible to remove entirely these inequalities, but the more exactly the surfaces of the bones come together the less will be the splintering. I have also, by driving an awl forcibly through the bones of the skull with a mallet, produced very little or a great deal of splintering where the point of the awl emerged, according as the bones were or were not firmly supported.

What, then, is the explanation of the facts that in some depressed and punctured fractures of the skull, including all those occurring during life, there is markedly more extensive splintering of one table than the other; while in others it exists to only a slight degree, and even may not take place at all? I answer: the comparative *want of support*, in the former, of the table last affected by the fracturing force, and *its presence* to a greater degree in the latter.

If the experience of every-day life had been brought to bear on this subject, it must certainly have been understood long ago. Who has not found out that when a nail is driven through two boards, there is splintering of the wood when the point of the nail emerges from the second, but none where it emerges from the first? Or who has not seen a carpenter, when about to make an auger-hole in a planed board, attach a piece of wood to its under-surface, to prevent the auger making splinters at the lower end of the hole?

Although in these fractures of the skull the unequal splintering of the tables is due to the fracturing force first attacking the table, supported by the other and the intervening diploe, and afterwards that, without any firm support, it varies under certain circumstances. 1. When the breaking body is blunt it carries the bone before it, and affects a larger area of the second than the first table. 2. The greater the momentum of the breaking body the less is the splintering. This is probably owing to the particles of bone in the course of the breaking body having been broken off from their connexions with the surrounding particles before they had communicated to the latter much of the fracturing force. 3. It has commonly been said that brittleness is a cause of splintering, but to me it appears that its influence is in the opposite direction. In brittle substances the connexions between the component particles are readily broken, and when such a substance is acted on by a breaking body the particles affected have a greater tendency to sever their connexions with neighbouring ones than communicate to them the fracturing force. Nothing could be more brittle, were it possible to make it, than a wall of sand; yet, if a cannon-ball passed through it, there would be no cracking of the wall: the sand only in the course of the ball would be carried away.

Belfast.

## A CASE OF POISONING BY CORROSIVE SUBLIMATE.

BY T. WEMYSS BOGG, M.B. LOND., M.R.C.P.

IN May, 1873, I was requested by the coroner of the district in which I then resided to make a post-mortem examination of the body of an infant in the neighbouring village of D——. The reason for ordering the inquest was simply that the child had died without medical attendance, and that it was illegitimate, its mother being for some years a widow. There was, however, no suspicion of foul play.

On examining the body thirty-three hours after death, I found a full-grown male child, not apparently emaciated, presenting cadaveric congestion of the back, loins, front of thighs, and feet, and blueness of the dorsum of the penis. The navel-string had separated, and there was a black stool in the napkin. The only history I then learned was that the child had lived nine days, had latterly vomited all its food, and finally died in convulsions. In this, of course, there was nothing inexplicable on the supposition of improper feeding, except the stool, which might easily have been taken for a dark, bilious evacuation. The lips, however, were dry and black, the gums white, and the tongue covered with dark-brown fur. On section, the right heart and venous system were found distended with blood, the lungs congested, the left one being partly in a state of atelectasis. Liver dark, with congestion both at centre and circumference of lobules. Gall-

bladder distended. Spleen dark, soft. Kidneys lobulated; bases of the pyramids congested. Bladder firmly contracted. Brain very soft, with few punctæ, and some distended veins in the pia mater. The stomach presented no unusual appearance on its anterior surface; when opened, however, it disclosed that there had been foul play. Around the cardiac orifice it was nearly black, hard, and corroded; also corroded and perforated at the lesser curvature close to the gullet;[1] the rest of the organ was pale, with punctiform redness here and there, and contained discoloured viscid mucus; no trace of food. Duodenum filled with orange-red fluid, and presenting ramiform redness; ileum had greenish semi-fluid contents here and there; colon empty, with no appearance of hyperæmia. On examining the gullet, it was found to be dark and quite black at the cardiac end; its inner surface at that part was slaty, with a dark, solid substance lying upon it, which was apparently the lining membrane corroded and detached. The larynx was inflamed; dark fur covered the anterior surface of the epiglottis; yellowish lymph adhered to the vocal cords; and the trachea contained a red secretion, and presented ramiform redness.

Subsequent inquiry revealed the fact that the "vomiting" had continued three or four days before death, and had consisted in the instantaneous rejection of all food put into the infant's mouth. On being directed by the coroner to make an analysis, I found abundant evidence of the presence of corrosive sublimate; but as none of this poison could be traced to the possession of any suspected person, the magisterial inquiry, in which the inquest resulted, had a fruitless termination.

Several points are suggested by the consideration of this case. It shows the ease with which an instance of death by poisoning might be passed over as attributable to natural causes, and thus not requiring investigation; and it indicates the desirability that medical men should pause before signing a certificate of death by convulsions, and consider (if they have not seen the child during the attack) whether there is no possibility that the life may have been taken by criminal means. The case points also to the desirability of holding an inquest on every child which dies in convulsions without medical attendance, especially on illegitimate infants; and it evidences the fact that the present restrictions on the sale of poisons are inadequate. I am informed that bichloride of mercury, being an ingredient of many sheep-washes, is sold for that purpose to shepherds, and from them is easily obtainable by farm-labourers, who keep it in store to be used as a remedy for syphilis; it thus lies ready to hand for the destruction of human life whenever the motive arises, and inquiries as to its purchase by the accused person elicit no result. The large quantities used sometimes by a single farmer would allow of theft of any ingredient to a considerable amount without his knowledge; the only remedy therefore would appear to lie in forbidding druggists to sell the poisonous ingredients of a sheep-wash uncompounded. Against the misuse of the wash when compounded it is probably impossible to guard, but its disagreeable taste would cause its instant rejection by any intended victim.

St. Leonard's-on-Sea.

## NOTE ON FREQUENCY OF PLEURAL EFFUSION IN INFANCY.

BY THOMAS BARLOW, M.D.

IN the "Mirror" of THE LANCET of Dec. 7th, there is the report of a case of pleural effusion in a child aged four months, who was under the care of Dr. Cayley.

I venture to say a word or two in further illustration of the early age at which pleurisy may occur, because even in so valuable a text-book as that of Barthez and Rilliet the extreme rarity of this disease under six years of age is dwelt upon.

I have notes of a post-mortem made on a child under three months old in whom pleurisy was found; but the effusion was lymph; there was no fluid and no pneumonia. But the earliest case of liquid pleural effusion which I have seen was at the Paris Foundling Hospital in an infant a few days old, in whose left pleura at the post-mortem at least two ounces of sero-sanguinolent fluid were found, and a very small focus of softening lung-tissue close to, but not actually ulcerating through, the visceral pleura.

After four months the youngest case which I know to be on record is one aged five months, referred to by Dr. Hillier (p. 70).

Dr. West (p. 383) had a case aged seven months.

Dr. Goodhart has recorded one at nine months and another at thirteen months.

Taking only the period between eleven months and two years, I have added up fourteen cases of pleural effusion from my out-patient notes. Of these effusions, eleven were purulent, two were serous, and one was serous with thick lymph. The outcome of the above I take to be that pleural effusion is probably much more frequent in infants than some of the text-books, much less the Registrar-General's reports, would have us believe.

Dr. Cayley refers to the "practice of auscultating infants suffering from dyspnœa," but I am sure he would be ready to acknowledge that the symptoms of pleurisy in infants are very often latent. Considering this fact, and the extreme frequency with which effusions become purulent in infants, I think I am justified in urging the more frequent use of the hypodermic syringe for diagnostic purposes in cases of doubtful chest-dulness.

Montague-street, Russell-square.

[1] The coats may have given way during removal of the organ. I did not notice any evidence of peritonitis.

# A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, eo inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## UNIVERSITY COLLEGE HOSPITAL.

### DENTIGEROUS CYST OF LOWER JAW; A BROKEN-DOWN TOOTH REMOVED SOME WEEKS AFTER; CURE.

(Under the care of Mr. HEATH.)

W. A. C——, aged thirty-four, a french-polisher, was admitted March 5th, 1877, with the following history. He had been a soldier, and had contracted syphilis. He was not salivated. He spent some of his time in India as a soldier. Had been a moderate drinker. About nine years ago he noticed a swelling of his cheek, the size of a marble, which he attributed to a fall. It gradually got bigger, but only inconvenienced him by its size and disfigurement.

On admission he was a well-nourished man, the tongue clean, and general health good. He complained of occasional pain in the tumour. There was a tumour the size of an ordinary orange, round, very hard, fixed to the angle of the lower jaw on the right side; the edges were well-defined, the overlying skin natural. There was neither fluctuation nor pulsation, but the facial artery could be felt pulsating over it. Felt from the mouth, the anterior part of the wall of the tumour yielded slightly to pressure.

On March 7th, the patient being under chloroform, Mr. Heath punctured the yielding part of the tumour with a large trocar from the mouth. It was found to be a large hollow cyst, with no fluid in it. The walls of the cyst were broken down, and some pieces of bone removed with the bone forceps. The cavity was then plugged with lint. The cyst was lined with soft tissue, which, on microscopical examination, showed portions of hyaline cartilage, and cartilage with a faintly fibrous matrix, surrounded by and gradually passing into oval and spindle cells. Two days later the plugs were removed, and the cavity was well syringed with Condy's fluid.

On March 21st the walls of the cyst were again forcibly crushed, and the fragments removed. The cyst extended in between the two tables of bone, but the inner table of the jaw and the teeth were unimpaired. The cavity was plugged with lint.

Next day there was considerable swelling of the lip and cheek. There was no sensation in the right lower lip. The swelling, however, gradually went down, and in three or four days sensation in the lower lip returned.

On the 26th Mr. Heath removed two small pieces of bone, which had become detached by suppuration. They were a quarter of an inch square. A few small pieces of bone were removed in the dressings two days later.

On April 5th the patient was much better, and the swelling was much less.

He was discharged on April 5th. A fortnight later he attended the hospital, and an examination of the tumour was made. At the bottom of the cavity a tooth was felt firmly attached. The tooth was removed by forceps, and was found to be a bicuspid, with a perfect crown to it and two small fangs. After this the cavity closed, and later on the right cheek appeared like its fellow, all swelling having disappeared.

*Remarks by* Mr. HEATH.—This case of dentigerous cyst is remarkable for the advanced age at which it occurred, and also for the fact that the cyst was empty, the fluid which must have been present at one time having become absorbed. A careful search for a tooth was made at the time of the operation, but it could not be found, and the explanation of its discovery at a later date is probably that the lining membrane of the cyst had completely covered in the tooth, which only became apparent when the membrane had been destroyed by suppuration. It will be noted that no external incision was needed in this case, and there can be no question that cases of extensive cystic growth may be more satisfactorily treated from within the mouth by crushing the cysts and removing any solid material contained in them, and thus preserving the lower border of the jaw, than by removal of the entire thickness of bone.

## LINCOLN COUNTY HOSPITAL.

### INFLAMMATION AND SLOUGHING OF SCROTUM, CONSEQUENT UPON THE APPLICATION OF RESIN OINTMENT.

(Under the care of Mr. SYMPSON.)

THE following case is interesting as showing the danger, under certain circumstances, of the application of so mild a stimulant as resin ointment.

A well-built, healthy-looking man, aged sixty, was admitted on May 11th, 1878, with redness and very considerable œdema of his scrotum, penis, and groins, and with three large sloughs upon the former. He stated that he had been employed in a travelling menagerie, and that a few days prior to admission his scrotum had become abraded as a result of prolonged walking; to the abrasions he had applied yellow basilicon ointment, with the effect of exciting a great amount of inflammation, followed by sloughing. He had suffered no difficulty in micturition, and a large-sized catheter passed easily into the bladder.

The sloughs were separating on the 16th, and leaving a healthy granulating surface; and on June 4th the sloughs had all come away, and the resulting sores were granulating and cicatrising healthily. On the 29th he was discharged nearly well.

The treatment consisted of rest in bed, good diet, and beer, ammonia and cinchona internally, and poultices, succeeded by carbolised oil and zinc lotion, locally.

## SALFORD ROYAL HOSPITAL.

### EXTIRPATION OF INTER-UTERINE FIBROID.

(Under the care of Mr. WALMSLEY.)

K. L——, aged 41, admitted March 15th, 1877, into one of the private wards of the hospital. She was unmarried. The aspect was exsanguine and somewhat pinched. Menstruation began in her fifteenth year, and had always been regular and natural until four years ago, when it began to be somewhat excessive, and was attended with more pain. These symptoms continued gradually to increase. The catamenial flow at the time of admission was excessive, and lasted from seven to fourteen days, readily augmented by exertion. She passed large clots, both black and bright-red. The pain was very exhausting, and lasted all through the period. There was frequent leucorrhœa.

Extending behind and above the pubes a hard globular tumour somewhat larger than an ordinary cricket-ball was felt, tender on pressure, as also was the left ovary.

On examination per vaginam the tumour was readily felt attached to the anterior wall of the uterus. The sound could only be introduced two and a half inches. On March 16th a laminaria tent was introduced and removed next day, when four others were inserted. The dilatation of the cervix was attended with severe pain, and morphia was given repeatedly.

On March 18th the os was well dilated and soft. The tumour could be easily examined; it occupied the whole anterior wall of the uterus, being completely sessile and somewhat conical. It was impossible without further dilatation to get the chain of the écraseur round the extensive base. The house-surgeon, Dr. Walter, undertook further dilatation with Barnes's bags. A few hours later, Dr. F. H. Walmsley having administered chloroform, Mr. Walmsley was able, with a vulsellum, to bring the tumour slightly nearer the orifice of the vagina, and to seize the tumour with another vulsellum at a point opposite the one first introduced, only much higher up in the uterine cavity. With considerable difficulty the chain was now passed beyond both vulsella, and was thereby prevented from slipping. The écraseur was worked slowly, and the tumour separated and brought away without any hæmorrhage. Calcification had commenced in the centre of the growth. Slight aching and soreness were complained of from time to time, but there were no unfavourable symptoms till the morning of the day but one after the operation, when the patient had a severe rigor, followed by much sharper pain in the uterine region. Tongue slightly furred; temperature 104·4°; pulse 108. Linseed-meal poultice with belladonna liniment were applied to the abdomen. Five grains of compound ipecacuanha powder were given every four hours. Vaginal injections of Condy and warm water were frequently used. Next day the temperature was 99·4°; there had been no repetition of the rigor, and the pain was decreasing. Sixty grains of compound rhubarb powder were administered later in the day in an enema of warm water, which produced two copious evacuations.

From this time the progress was steadily favourable. Occasional sleeplessness was relieved by bromide of potassium, abdominal tenderness by belladonna liniment. The uterine discharges were very slight. On April 4th, the Condy injections were changed for others of glycerole of lead and tincture of opium. On the 9th she was not so well; she had pain in the calf and popliteal space of the right leg. The veins were swollen and tender on pressure, but not indurated, nor was the femoral vein. Temperature normal. Hot fomentations and belladonna liniment were applied. These symptoms had quite subsided in two days, and did not return. On the 15th there was not the least abdominal tenderness; the uterus could not be felt through the abdominal walls; discharge was scanty and colourless. Patient was able to sit up. Quinine was ordered. On the 18th the catamenia had been present for two days. The flow was scanty, but natural, and the pain was slight. Next day she left the hospital apparently perfectly well.

On Sept. 27th, 1878, seventeen months since she left the hospital, she was seen again. A careful examination was made, but no trace of tumour could be found, nor was there even any leucorrhœa. The patient had menstruated regularly during the interval; the flow had not been excessive, nor had there been any abnormal pain.

Considering the extensive base of this tumour cut through by the écraseur, the recovery with so few unfavourable constitutional or local symptoms may be regarded as very satisfactory.

## CARDIFF INFIRMARY.

### STRANGULATED INGUINAL HERNIA; OPERATION; DEATH; NECROPSY.

(Under the care of Dr. SHEEN.)

J. K——, aged thirty, a coloured seaman, was admitted on Sept. 9th, at 5 P.M. He stated that in March last, in helping to lift a boat overboard, he ruptured himself. He followed his employment after laying up a few days, and felt no pain or inconvenience till three or four days before admission, when he had much pain in scrotum and lower part of abdomen, entirely relieved by a linseed poultice. The pain recurred on the 6th and 7th, and on the 8th he took to his bed, and was seen by a surgeon, who diagnosed strangulated right scrotal hernia. An attempt was made to return the rupture, but in vain, although the patient expressed himself relieved after the manipulation.

On admission the right scrotum and inguinal canal were much larger than the left, and thickened, tense, and painful to the touch. The swelling was not translucent. There was no impulse on coughing. There was hiccough occasionally. The pulse was 100, full. The patient was not sick, nor had he an anxious look. He stated that the right scrotum had been larger than the left ever since the accident, and that nothing had ever been "put back." A strangulated hernia was diagnosed. The parts were manipulated under chloroform with a view to reduction, but without any effect, except a diminution of tension. The patient expressed himself as somewhat relieved, the hiccough ceased, and as there were no urgent symptoms he was put to bed and ordered an enema. The bowels were open three or four times after the enema. Next day the pain was less, though the patient still gave evidence of pain when the parts were touched. Pulse 96; temperature 101·2°.

At 4 P.M. (Sept. 10th), the patient remaining in the same condition, after a consultation herniotomy was decided upon. In the course of the operation there were two noteworthy points. When it was thought the sac was opened, an escape of serous fluid occurred, which was, however, yellower than usual in colour. The appearance of the parts exposed was peculiar. It was not bowel, and was scarcely like thickened omentum. A more careful examination detected a small cyst at the lower part of the wound as the source of this fluid, and it was then discovered that the sac had not been opened. The operation being continued cautiously, the sac was discovered, the wall being quite a quarter of an inch thick. The sac was, however, empty, but gave out an excessively offensive odour. The finger could be passed easily into the abdominal cavity by the canal. The parts were brought together, the patient put to bed, and a quarter of a grain of morphia given hypodermically at once, to be followed by fifteen drops of the sedative solution of opium every four hours.

There were no noticeable symptoms during the day. At 9 P.M. the pulse was 96, and the temperature 100·2° F. He became worse, however, during the night, and died at 9.30 on the morning of the 11th.

*Necropsy, next day, by* Mr. H. R. VACHELL, house-surgeon.—On opening the abdomen there was a loop of small intestine ten or twelve inches long in the right inguinal region, black in colour, with small blebs containing air on its surface, and manifestly gangrenous. The gangrenous portion of intestine had its convexity towards and approached the internal inguinal ring. The intestine was wholly within the abdominal cavity, and the gangrenous portion was adherent to other portions of the neighbouring intestine by a limited effusion of lymph. The gangrenous intestine, when divided, was found to be much thickened, and contained one or two cysts on its outer surface.

# Medical Societies.

## CLINICAL SOCIETY OF LONDON.

*Treatment of Popliteal Aneurism by Esmarch's Bandage.—Pyæmia and Empyema following on Perforation of Appendix Cæci.—Scleroderma.—The Estimation of Hæmoglobin in the Blood.*

THE ordinary meeting of this Society was held on the 13th instant; Mr. Christopher Heath, Vice-President, in the chair. A lengthy and animated discussion upon the use of Esmarch's bandage in popliteal aneurism occurred out of two successful cases related by Mr. Hutchinson, and formed the chief business of the evening.

Drs. Goodhart and Mahomed were nominated auditors of the Society's accounts.

A brief communication was read from Sir JAMES PAGET, in which he stated that since the reading of his case of Discharge of Watery Fluid from One Nostril he had been, by the kindness of Mr. Neale and Mr. Charles Hawkins, referred to a case reported by Dr. Elliotson in the *Medical Times and Gazette*, Sept. 19th, 1857, and referred to by Sir B. Brodie in the collected edition of his writings. This patient, a female, had been twice subject to an affection apparently similar to that recorded in Sir J. Paget's case—viz., at the age of twenty-six and forty. The quantity of fluid, which dropped from the left nostril only, was large—as much as two or three quarts per diem; but Sir James added there was nothing in the record to indicate what was the real nature or source of the fluid.

Mr. JONATHAN HUTCHINSON read notes of two cases of Popliteal Aneurism treated by Esmarch's Bandage. The subject of the first was a robust gentleman aged twenty-six, who had never had syphilis. The tumour filled the right popliteal space, and pulsated strongly. There had been pain for three months, but the pulsation had been recognised only a month. He had been placed under Mr. Hutchinson's care by Mr. Drew. He was admitted into the London Hospital, and, after three days' rest in bed, ether was given and Esmarch's bandage applied to the entire limb. It was put on tight below the knee, very lightly over the tumour, and tightly again on the thigh. The elastic strap was applied as tightly as possible in the upper third, and after a little time the bandage was removed. The tumour was left full of blood, which was completely stagnated. Ether was kept up for an hour, and at the end of that time the strap was removed and a horse-shoe tourniquet substituted. No pulsation ever returned to the tumour, but as a matter of precaution the tourniquet was retained for a few hours. The subsequent recovery was rapid and complete. The second case was less speedily successful. Its subject was a gunnery instructor from Shoeburyness, who had been treated by pressure for an aneurism in the calf two years previously. On that occasion success had been obtained by thirteen days' compression. The aneurism on the second occasion filled the popliteal space, and was of the size of a large orange. It pulsated strongly. Esmarch's bandage under ether was used for one hour in exactly the same way as in the previous case, but with no benefit. The tumour beat as before. Three days later another trial was made of the same plan, but on this occasion arrangements had been made, by relays of students, to keep up digital pressure after removal of the constricting strap. The man was kept under ether for two hours. At the end of that time the strap was removed, and during the change of hands it became evident that pulsation was still present, but it was more easily controlled than before. Manual compression was kept up for about seven hours, at the end of which time pulsation had quite ceased. The tumour remained solid, and rapidly diminished in size; and the man left the hospital a few weeks later, quite well. It was thought that in this case, although the bandage did not produce consolidation, yet it conduced to the cure, and it was certain that on neither occasion did it do any harm. Mr. Hutchinson stated that he had brought forward these cases, in neither of which was there anything original in the

treatment, in order to elicit from other surgeons statements of their experience and opinions in reference to this novel and important method. He wished to acknowledge his obligation to his colleague, Mr. Waren Tay, and his house-surgeons, Mr. Price and Mr. Bennett, for their assistance in carrying out the details. — Mr. MAC CORMAC inquired if the bandage was kept applied to the limb, or removed after the upper cord had been tied. — Mr. HUTCHINSON said the bandage was kept on for a short time. — Mr. T. SMITH had recorded a case of popliteal aneurism treated by Esmarch's bandage about eighteen months ago (LANCET, vol. i. 1877, p. 750); and since then he had applied the same method, but in a somewhat different manner, following in this the example of Mr. Croft (LANCET, vol. i. 1878, p. 85). The case was that of a well-known member of the profession; it was under the care of Sir J. Paget and himself, and was of interest, for in it no chloroform was administered. The bandage was applied from the foot to a point just below the aneurism, and then carried in front of the patella to the thigh, where it was sufficiently tightened to compress the artery, thus avoiding the use of the cord, which abroad had been found in some cases to injuriously press on the nerves and give rise to paralysis. The bandage was left as long as the patient could bear it, when it was replaced by an ordinary tourniquet very firmly applied on the artery. This alternation in the compression was continued throughout the day, the treatment being commenced at 9 A.M. At 4.30 P.M., when Mr. Smith again saw the case, it was evident no coagulation had taken place; but shortly before 6 P.M. violent pain was experienced at the seat of the aneurism, an indication of coagulation having taken place. In a few minutes the arteries in the neighbourhood of the knee-joint (notably the anastomotica magna) were seen pulsating, and from that time the cure of the aneurism was complete.—Mr. MORRANT BAKER had applied the bandage in one case of popliteal aneurism. The subject was between forty and fifty years old, and the case was an unfavourable one, for there had been already some escape of blood from the aneurism. The bandage was applied in the manner just described by Mr. Smith. Nor was chloroform administered. It was kept on for an hour and a quarter, and then removed because it could not be borne, but compression was kept upon the artery, and after an interval of one hour and a half it was reapplied. It had again to be removed because of pain; digital compression was then kept up for forty minutes, when the aneurism ceased to pulsate. The coagulation was not attended by any pain.—Mr. MAUNDER observed that it was a recognised principle in surgery that some aneurisms will be cured by one method of treatment, others by another, and yet others by a combination of two or more methods, but that there was no case of surgical aneurism in which it was possible to say beforehand that it was amenable to cure by one particular method. He had twice tried Esmarch's bandage, in both instances with failure, and in one case digital compression kept up for ten or twelve hours resulted in cure; in the other case—one of traumatic origin—he had to resort to ligature. He knew no method of compression more certain than the digital method.—Mr. BARWELL said there was one form of aneurism which could not be cured by pressure—viz., the fusiform. He had cured a case of popliteal aneurism by Esmarch's bandage in a phthisical man, who had albuminuria, and had, moreover, a fusiform aneurism in the axilla. He had resorted to the bandage after failure by digital compression; and deeming it essential to success that the sac should be kept full of blood, he had covered the aneurism with a shield of tin. No anæsthetic was given, and the bandage was kept applied for one hour and a half, the compression not being absolute, a small amount of blood being allowed to enter the femoral artery. It was then removed, and next day again applied, and so on for five or six times, but without effect. Then, although the arteries were very diseased and rough, he resorted to ligature, taking care to apply this gently, but to secure the second knot firmly. No bad symptoms followed, and in ten days the patient left the hospital.—Mr. SMITH pointed out that Mr. Barwell did not carry out Esmarch's method, for he had allowed blood to enter the vessel; whereas the principle of the method was that the arteries should be thoroughly emptied, and that the sac should be full of stagnant blood.—Mr. BARWELL said that in one of the attempts the method was carried out fully, but it failed as on the other occasions. — Mr. PAGE had recently under treatment a case at St. Mary's Hospital, which appeared to be one very suitable for this method. Still, after three applications, each lasting less than an hour, no improvement followed, and ligature had to be resorted to. At the same time another case was so treated by Mr. Lane, and this also failed. He could not account for the failure. Dr. Macdougall, of Carlisle, had successfully cured a large thin-walled popliteal aneurism by Esmarch's bandage. It had been suggested that the mode of cure was from clotting in the popliteal artery extending into the aneurism; but it was doubtful if the occlusion of the artery did not follow after the coagulation in the sac. No case had been yet published showing any disastrous results from arterial occlusion, following the use of the bandage; but he believed one such case had recently occurred to Mr. Pemberton, of Birmingham.—Mr. BRYANT said that he had to record an unsuccessful case. It was that of a man forty-seven years of age with a rapidly-increasing popliteal aneurism of large size. The patient was stupid and irritable, and did not bear digital or instrumental compression, so that recourse was had to Esmarch's bandage. This was applied from the foot upwards to the aneurism; then, avoiding this, it was passed round the thigh sufficiently firmly to compress the artery above. The patient was kept under the influence of morphia, and a certain amount of consolidation appeared to have taken place, when, after about an hour, it was thought advisable to remove the bandage, as the foot became cold. At that time there was a more thrilling pulsation in the sac, but gradually pulsation returned more strongly, and in three days it was as forcible as ever. The bandage was then reapplied, this time under anæsthetics, again with the same result, and with the same return of pulsation after a few days. Mr. Bryant then resorted to ligature, and with excellent result, the wound uniting by the first intention, the patient not even being aware that any operation had been performed. But, although the aneurism was thus cured, at the end of the fourth day after ligature gangrene appeared in the foot, and extended for about a hand's breadth above the ankle, necessitating amputation below the knee. The patient ultimately recovered. Mr. Bryant attributed the gangrene to occlusion of the small vessels consequent on the use of Esmarch's bandage, Mr. Page's suggestion as to the coagulation extending from the sac into the vessel beyond being probably the correct one. At the same time he (Mr. Bryant) was not disposed to condemn the bandage from the failure of this single case.—Mr. MAHOMED pointed out a possible risk in the use of Esmarch's bandage where general arterial disease was present. In some recent experiments with the plethysmograph he had found that when Esmarch's bandage was applied to one arm the volume of the other arm increased in size because of the increase in the quantity of blood received by it. Of course it was obvious that the blood pressed out of the limb must be distributed among the rest of the vessels in the body, materially increasing their tension, and in a sudden manner. If general arterial disease were present, this sudden increase in the amount of blood in the cerebral vessels might lead to ill results. In such conditions, then, it would be worth considering whether the volume of the blood should not be reduced by bleeding at the time of application of the bandage. The same danger did not arise in the case of ligature, where the limb is not emptied of blood. Mr. PEARCE GOULD referred to the fact that already two specimens of aneurisms cured by Esmarch's bandage had been described—one by Dr. Reid, the first case thus treated; the other by Mr. Wagstaffe at the Pathological Society last year. In each case the shrunken sac of the aneurism was found filled with a dry granular blood-clot (not laminated fibrin), while the vessel upon which it was situated was completely obstructed by organised thrombus (fibrous tissue). He had ventured to advance the following explanation of these cases. When the bandage was applied, a coagulum was formed in the aneurism, and then spread to the adjacent artery. In the vessel, the clot organised by growth from the endothelium and lymph effused from the vasa vasorum, and caused the permanent obliteration of the vessel; while in the aneurism no endothelial growth could occur, and from the unhealthy state of the sac, or from layers of laminated fibrin lining it, no organisable lymph was effused into the clot, which remained in the same condition as a clot might remain in any other part of the body when encapsuled. The cure took place in the artery rather than in the aneurism. Mr. Bryant's case was of great interest as bearing on this explanation. No doubt coagulation took place in the aneurism, but the slight pulsation after the removal of the bandage showed that the artery was not ob-

structed. The clot in the aneurism did not become organised, but was broken up and carried away, and no doubt the subsequent gangrene was due to the plugging of the smaller vessels by fragments of this clot, aided by the ligature. If this explanation be the true one, the treatment by Esmarch's bandage promised to be most successful where the mouth of the aneurism was large and coagulation would readily pass from aneurism into artery; while a fairly healthy state of the artery wall would greatly facilitate the subsequent organisation of the arterial thrombus.—Mr. NORTON had applied the bandage in a case of left popliteal aneurism, but without success. There was much vascular and also cardiac disease, and, besides the popliteal, there were two aneurisms in the right femoral artery.—Mr. HEATH said it was remarkable that Mr. Hutchinson should have had two cases in which the aneurisms were almost identical, and he agreed with Mr. Barwell that this treatment was of no use in fusiform aneurisms. No doubt the most suitable cases were such as Mr. Gould had indicated—viz., where the sac had a large open mouth. The case reported by Mr. Smith was a good instance of the effect of the treatment, especially as the patient in question had previously had an aneurism in the other limb. As to Mr. Bryant's case, it was possible that the gangrene was attributable to the ligature, although it might have been favoured by the use of the bandage. With regard to the amount of suffering entailed on the patient, he might remark that in a case he related to the Society last year, where the patient was subjected to treatment by Esmarch's bandage, Carte's tourniquet, and twice to ligature—once with catgut and antiseptic precautions, and on the second occasion with hempen ligature,—the least amount of discomfort was experienced by the ligature with antiseptic measures.—Mr. HUTCHINSON, in reply, said he had been struck with the same view as to Mr. Bryant's case that Mr. Heath had taken. The case seemed to him rather a fact against ligature, and not against Esmarch's method. In answer to Mr. Page he said that probably the fusiform variety was less hopeful for treatment than others; but in his cases, with allowance for the effect of the mechanical conditions, he had also employed such aids to coagulation as dry food, with such drugs as iodide of potassium, lead, digitalis, &c. The great advantage of the plan seemed to be that it could be carried out under anæsthetics, and, therefore, painlessly, and, ether being given, no risk was entailed from the anæsthetic. It was important to apply the bandage firmly, so as thoroughly to arrest the flow of blood, and immediately on its removal digital compression should be employed, great care being taken to prevent the blood from passing into the tumour on removal of the strap. He was glad to have been the means of eliciting so interesting an expression of surgical opinion.

Dr. WHIPHAM read notes of a case of Perforation of the Appendix Cæci and Cæcum, followed by Pyæmia, with Empyema and Abdominal Abscess. The patient, a lad aged eighteen, after rowing one day in August, 1877, on the Thames, bathed in the river, and took cold. Two days afterwards he was attacked with severe pain in the right, and subsequently the left side, accompanied by diarrhœa. He sweated profusely at night, and soon became extremely weak. After a six weeks' illness he recovered perfectly. The illness for which he was admitted into St. George's Hospital commenced seven days previously, after exposure on a house-top for a whole day. In the evening he felt chilly, and was attacked with severe pain in the right side, and vomited profusely. Next day he resumed his work, and in the evening experienced pain in the right inguinal region. On the third day he discontinued work, as the pain had extended to the flank. From this time he became seriously ill; the bowels, hitherto regular, became much purged; he was troubled with cough and expectoration. On admission, the patient was very ill; had severe pain in the belly, more especially in the right inguinal and epigastric regions. About the midsternum was a rose-coloured spot, not elevated, which disappeared on pressure. Diarrhœa was profuse, the motions being dark-coloured. There was distinct evidence of fluid in the right chest. During the first week of his residence in hospital, the abdominal pain decreased; but no marked improvement in his condition occurred, and therefore, on the ninth day, a small aspirator-needle was introduced into the chest between the seventh and eighth ribs posteriorly, and some yellow pus withdrawn, and a tube introduced subsequently in the axillary line, through which offensive pus of a reddish-brown colour escaped. Three days later an abscess made its appearance externally at the back of the chest, which was eventually opened, but no communication discovered between it and the pleural cavity. The patient failed rapidly after this, and died on the fortieth day after admission into the hospital. At the post-mortem examination, it was found that the tube had been passed into an abscess which had formed beneath the liver, and that the right chest, save by the small exploratory puncture, had not been tapped. An abscess was found in the right iliac region, and free in the cavity lay a pin, which had made its way through the cæcum and appendix cæci into the surrounding tissues. The interest of the case consists in the difficulty of diagnosis: first, as to whether the boy was suffering from typhoid fever or tuberculosis; secondly, as to the evacuation of an abdominal abscess in place of the contents of the pleural sac.—Mr. LAWSON observed that the case was obviously one of pyæmia following on the ulceration of the appendix produced by the foreign body.—Dr. CAYLEY stated that in Germany the appearance of an herpetic rash on the lips was held to exclude typhoid fever in the diagnosis of a doubtful case. Was that the general experience?—Dr. SOUTHEY mentioned two cases analogous to the present: one a case of suppurative hepatitis with jaundice, from thrombosis of portal vein, due to an abscess formed around the appendix cæci; and the other a case in which perforation of the appendix, caused by a tintack, had led to abscess with general pyæmia and empyema.—Mr. HULKE said that the occurrence of pyæmia after ulceration of the appendix was not uncommon; and he related a case where pyæmia with parotid abscesses and lobular pneumonia followed upon cæcal ulceration caused by impaction of damson-stones.—Dr. TAYLOR believed that in some of these cases the empyema was not due to the pyæmic process, but was produced by direct extension of the suppurating process from the abdomen. He had published some facts supporting this in Guy's Hospital Reports.—Dr. WHIPHAM said that no doubt the case was one of pyæmia: the difficulties of diagnosis, and the results obtained by paracentesis, were the points he wished chiefly to insist on. In reply to Dr. Glover, he added there was nothing in the history to show how the pin had entered the body.

Dr. RADCLIFFE CROCKER showed a case of Scleroderma that is under the care of Dr. Eustace Smith at the East London Hospital for Children. The patient was a girl aged thirteen, admitted into hospital on August 22nd. The mother died of phthisis. Patient had acute rheumatism four years previously. Two weeks before admission she complained of rheumatic pains in her arms, which were rubbed with liniment, and the skin was then noticed to be hard. The induration spread over nearly the whole body, and on admission the whole face appeared swollen, especially beneath the lower jaw, the glands being enlarged all round. There was a fixed expression, and the face was pale. On touching her the skin was found as hard as frozen fat, did not pit on the firmest pressure, and felt thickened and fixed to subjacent tissues, so that it was impossible to pinch up a fold. Similar induration affected the whole skin of the body, except the palms, soles, and eyelids. In the mouth the mucous membrane of the right cheek was affected, but not that of the left, nor the tongue. Her mouth could be opened fairly, without pain, but the tongue was protruded with difficulty. The induration was most marked on flexor surfaces, the skin being shortened, so that the limbs were more or less bent, and on the forearms had the appearance and feel of cicatricial bands across the joints, preventing extension beyond a right angle, but permitting some flexion. Forcible attempts at straightening produced pain. The abdominal walls were as rigid as in permanent tetanic spasm. There was no pigmentation. The lungs were healthy, but there was a faint pericardiac friction and a mitral regurgitant murmur. Temperature 101°; pulse 116; respiration 20. On August 27th the signs of pericarditis were more marked, but there was some diminution in the induration on the legs, and the tongue could not be protruded. On Sept. 11th pitting on pressure was noticed in the face, and on the 27th the face was a little smaller and more expression observable, but temperature rose to 105°, with renewal of pericarditis. On Oct. 28th there was another attack of pericarditis, with a temperature of 104·5°, and it was not quite normal till Nov. 27th. At present there is distinct diminution of induration over the face; the skin can now be pinched up with some difficulty; the hardness is nearly gone over the upper part of the ears and back of the hands,

and the fingers are quite restored. The feet and legs are also improved, except the front of the thighs. There is still pericardial friction and a systolic murmur. Noticeable features in the case were: the rapid onset, the process being complete in less than a fortnight; the almost universal diffusion of the induration; the association with acute rheumatism and cardiac disease; the repeated attacks of pericarditis; the high temperature, and œdema. The pyrexia was associated with the renewal of pericarditis, and possibly the caseous cervical glands were responsible for the œdema. Upwards of 109 of these cases are now on record since Thiersch wrote upon the disease in 1845, in all of which the diagnosis is undoubted. Marked symptoms are: insidious commencement; induration and immobility of the skin, widely diffused and most marked in the flexor surfaces, crippling the movements of the joints; absence of fever, except from complications; chronic course; general thickening in early stage, but no elevation above surrounding parts; non-fatality by itself and tendency to improve or to undergo shrinking and produce atrophy of the parts beneath from pressure, while treatment exercises slight influence over it. Other common but not invariable features are: its tendency to attack the female sex, and begin either at the back of the neck or forearms; its occurrence in early or middle life; the frequent association of acute rheumatism either some time before or immediately preceding, or even accompanying the sclerodema, as in this case, with valvular heart disease, sometimes dependent on the acute rheumatism, sometimes not; pigmentation, especially near the sebaceous follicles, which may precede or follow the induration, and the occurrence of ivory-like patches. The histology consisted mainly in the increase of the connective, elastic, and involuntary muscular tissue in the corium; disappearance of the fat, with increase of fibrous stroma. Groups of cells are always found in the deeper layers of the cutis and fatty tissue, especially in the neighbourhood of the sweat-glands. The prognosis is good for life. The induration may entirely disappear, but more often some parts improve, while others do not. Even when it has undergone considerable contraction, some increased mobility under the diligent employment of friction with oil and lotion may sometimes be obtained.—Mr. HUTCHINSON considered the case one of great interest. He had never before seen a case of universal scleroderma (which differs only in extent from Addison's keloid) in such an early stage.

Dr. GOWERS exhibited an Apparatus for the Clinical Estimation of the Hæmoglobin in the Blood, which he believed to be as exact, simpler, and more convenient than any yet made. The colour of the blood diluted with distilled water was taken as the index to the amount of hæmoglobin; and the fact that for twelve or twenty-four hours the dilution undergoes no change, and that the deposit is colourless, shows that all the hæmoglobin is rapidly dissolved out by the distilled water. As a standard, a dilution of 100 times is taken, 20 cubic millimetres of normal blood in 2 cubic centimetres of water. The same volume of the blood to be tested is then diluted until its tint is the same as the standard; the degrees of dilution necessary for this indicate the relation the hæmoglobin bears to that of normal blood taken as 100. Thus, if a dilution of 50 times gives the same tint as that of normal blood diluted 100 times, the amount of hæmoglobin is just 50 per cent. of the normal. The apparatus consists of two tubes in a small stand, each tube being of the same diameter. One contains the standard, which, for stability, is glycerine and gelatine tinted with carmine and picro-carmine to the exact tint of the dilution of normal blood—1 in 100. The other tube is graduated: 100 divisions = 2 cubic centimetres; each degree therefore = 20 cubic millimetres. A capillary tube holding 20 cubic millimetres, a bottle with pipette, stopper, and a guarded needle, complete the apparatus. In using it, a drop or two of distilled water is placed at the bottom of the graduated tube; the 20 cubic millimetres of blood are then measured and mixed with the drop of water; more water is then added until the tint is the same as that of the standard. The amount of water added, indicated by the numbers on the divisions, shows the percentage of colour—i.e., of hæmoglobin—compared to the normal. A specimen of healthy blood was shown, in which the tint of the standard was only reached by 105 dilutions; and a specimen of blood from a case of anæmia, of which the same volume of blood gave the tint of the standard at 22 dilutions (22 per cent.), and at 30 dilutions the paler tint was distinct even by the gaslight. The apparatus is made by Hawksley.

## MEDICAL SOCIETY OF LONDON.

*Histology of Psoriasis, Dysidrosis, Molluscum Contagiosum, and Follicular Lupus.*

THE ordinary meeting of the Society on the 9th inst., Mr. Erasmus Wilson, President, in the chair, was devoted to a microscopical demonstration of certain forms of skin disease by Dr. TILBURY FOX, who prefaced his remarks on the specimens exhibited by saying that the demonstration was particularly appropriate before that Society on whose proceedings the illustrious Willan had shed such lustre, and, further, whilst the presidential chair was held by Mr. Erasmus Wilson, who had laboured so honourably for half a century in the cause of dermatology in England. Specimens were shown illustrative of the following affections:—1. Psoriasis. This, Dr. Fox said, was a perverted overgrowth of the rete and cuticular cells, not due to inflammatory hyperæmia, but "a true tissue disease, in which the trophic nerves probably play the chief part."[1] At the same time qualitative blood-states, such as gout and struma, undoubtedly greatly modify and influence psoriasis. Dr. Robinson, of New York, had recently written a paper on the histology of this disease, and the researches of Dr. Fox and his brother had led them to corroborate that writer's views. They agree in showing that the primary change lies in activity and hyperplasia of the rete cells, with hyperæmia of the papillary layer as a secondary consequence. This tendency of certain tissues to take on hyperplasic growth was of especial interest in relation to the origin of cancer. 2. Dysidrosis. After recounting the clinical features of this affection, which he first described in 1873, although he had been acquainted with the condition some years previously, Dr. Fox described its histology, stating that it was comparatively useless to examine any but the earliest stages, as the enlarging vesicles displace the tissues so much as to confound the natural relations of parts. The specimens show dilatation of the sweat-ducts, swelling and granulation of the lining epithelium of the ducts and glands, so that the lumen of the coiled portion is blocked. There is no excessive dermic congestion, as in eczema, what is present being limited to the neighbourhood of the sweat-apparatus. The commencing vesicles occur in the rete over the interpapillary portion, and in some specimens ducts can be actually seen entering the vesicles. The only diseases with which it could be confounded were pemphigus and eczema—from each of which, however, it had many points of difference. 3. Molluscum Adenosum (M. contagiosum of Bateman),—the sebaceous origin of which was first pointed out by Professor Henderson in the forty-sixth volume of the *Edinburgh Medical Journal;* and the specimens exhibited fully bore out this view, which in recent years had been disputed by some German writers, who had been misled by the appearances shown in the later stages to assign the origin of the molluscous tumours to peculiar changes in the rete only. (Drs. Tilbury Fox and T. C. Fox recently gave an account of their researches before the Pathological Society, to which the reader is referred —*vide* THE LANCET, vol. ii. 1878, p. 547.) 4. Disseminated Follicular Lupus. Of this affection Dr. Fox showed drawings and some microscopic specimens. The eruption resembled an indolent acne; but no ordinary acne-treatment availed, and caustics alone cured the affection, which is met with in delicate or phthisical young subjects. Microscopically, it was characterised by a small-celled growth around the sebaceous glands and hairs.—Dr. THIN had been compelled to conclude that there was no evidence that the sweat-glands had anything to do with the condition described as "dysidrosis." The cavities of varying size in the rete mucosum containing pus-cells and granular matter precisely resembled cavities he had found in similar situations in ringworm and other diseases of the skin attended with irritation. He thought there was no evidence of affection of the sweat coil, and that their connexion with the sweat-duct was illusory, and due to the enlarging cavities occasionally rupturing a duct. The characters of psoriasis were well shown in the preparations. The term "disseminated follicular lupus" was misleading, for the changes were purely inflammatory, the condition being one of modified acne. Nor did he think that the preparation of mollus-

[1] See Fox "On Skin Diseases," third edition, p. 265, 1878.

cum contagiosum conclusively proved the sebaceous origin of that affection; some of the specimens showing a continuity between the rete mucosum and the epithelial growth.—The PRESIDENT, referring to the controversy concerning the true nature of "dysidrosis," said the chemical reaction of the fluid would go far to prove its nature: if acid, its origin from sweat-glands would be shown; if alkaline, it would indicate that it was the product of exudation. In his experience it was a rare disease. Dr. Fox's specimen clearly showed a vesicle under the cuticle, without any marks of inflammation, and in one specimen it was evident that the cells had become displaced from below upwards, occluding the sweat-duct, and thus leading to the formation of a cavity. He protested against the use of the word "psoriasis." Willan, who was a scholar, knew the meaning of the term lepra, and he (Mr. Wilson) thought it a great mistake that the good old term of lepra vulgaris should be discarded. It is a defective nutritive condition of skin, frequently hereditary, or occurring in the stock of cancer or of pulmonary consumption; and in these hereditary cases, where there seemed a tendency to hypertrophy of tissues, the papillæ were enlarged. He had not met with the disease called "lupus folliculorum" by Dr. Fox. He had described the disease called "molluscum contagiosum" under the name "molluscum adenosum," and he believed the sebaceous glandular growth to be excited by heat, friction, and sweating. Its contagious nature was, he held, still *sub judice*.—Dr. CROCKER said that Dr. Thin was mistaken in attributing the appearances in the specimen of molluscum contagiosum to imperfect hardening. That all the cavities in the specimens of dysidrosis should not exhibit ducts was obvious, since, in making sections of a flask-shaped body, more would be made through the dilated portion than through the duct. Nor had Dr. Thin proved that the cells in these cavities were pus-cells. The cases of "follicular lupus" were not ordinary acne, which in scrofulous patients goes on to suppuration; but these cases were very chronic, and clinically quite distinct from acne.—Dr. HARE protested against the use of the term "lupus," which has hitherto had a definite meaning attached to it.—Dr. FOX urged those who maintained that the disease he called "dysidrosis" was really due to inflammatory changes to look at one of his specimens, and they would see clearly the globe seated in the course of a sweat-duct. There was an entire absence of dermic inflammation, and he had not seen a pus-cell. Dr. Thin quite ignored clinical evidence. The secretion in the vesicles was distinctly acid, but in old-standing cases it is undoubtedly alkaline. He could find no evidence of the rete growing downwards in cases of molluscum. As regards follicular lupus, the fact that the President, with his great experience in skin diseases, had not seen a case, and the remarks of Dr. Crocker, proved that it was no ordinary affection. If you treat the disease like lupus it recovers, and he would ask if it were usual for common inflammatory products to run riot among the tissues, and lead to destruction followed by cicatrices.—The PRESIDENT said that the only way to settle the dispute was to ventilate the question. It was quite clear to him that Dr. Fox had met with a rare case.

# Reviews and Notices of Books.

*Animal Chemistry*; or, the Relations of Chemistry to Physiology and Pathology. A Manual for Medical Men and Scientific Chemists. By CHARLES THOMAS KINGZETT, F.C.S. pp. 494. London: Longmans. 1878.

THIS work is written by a thorough chemist who has applied himself earnestly to the difficult subjects of which he treats, and who has had no inconsiderable success in the scientific prosecution of animal chemistry. Mr. Kingzett has endeavoured, and we think with success, to compress into a volume of reasonable size all the trustworthy work on record in relation to animal chemistry, so far as it concerns the human body. We can well believe that he has found it no easy matter to wade through the wide literature of late years, and that it has taken him much time and labour to condense it. He has not, he states in the preface, thought it necessary to give any elementary instruction in chemistry, but takes for granted that his readers are tolerably familiar with the principles as they are taught in the lecture theatres of the London schools of medicine and in the ordinary text-books. The work is divided into five parts, the first being introductory, and giving a short historic account of the rise and progress of organic chemistry, from the time of its founder, Boerhaave, to the present day, Liebig, of course, standing out in strong relief. The second part deals with the organs, fluids, and processes concerned in digestion; the third part with nutrition, or "work and waste"; the fourth with the constitution of the several organs, tissues, and fluids of the body; and the last part treats of the albuminous compounds and ferments, the starches and fats, and winds up with dissertations on the physiological action of chemical substances, and on character, which is a little beyond the author's powers.

The third chapter is devoted to the structure hypothesis in chemistry, which he denounces as being extremely unprofitable and unmeaning, particularly for physiological chemistry—a conclusion in which we are quite disposed to agree, and he gives a good example in the case of glycocholic acid. This acid, when decomposed with dilute acids or alkalies, yields cholic acid and glycocine, and as the process employed is a mild one, and as these are the only products, it is inferred that in the original molecule of glycocholic acid, these substances or residues of them were co-existent. But even this is mere inference, because if glycocholic acid be submitted to other processes, it yields other products; and, applying the same reasoning, we make the *reductio ad absurdum* that this substance contains, as primary or proximate nuclei, such a number that the sum total of their elements is greater than the amount of substance operated upon. It is impossible, in the present state of our knowledge, to regard complex molecules as pieces of glass in a kaleidoscope, which have only to be shaken to form a new combination.

The chapter on the Albuminous Compounds, a most difficult one to deal with, is remarkably well given. The author believes that no pure albuminous substance contains phosphorus, the presence of that element showing the contamination of the specimen with some such organic compound as lecithine, or from the admixture of phosphate. Hence "nuclein" is an impure albuminous substance. The results of the decomposition of the albumins are given in some detail. He admits three forms of combination of albumen—with acids, with alkalies, and with salts. The results of the observations of Soxhlet, Rollett, Heintz, and Soyka, are very briefly but very lucidly given. He thinks there is a parent molecule common to all forms. The great difference between the albuminoids and the gelatinoids is that the latter contain no sulphur.

The section on Sweat is rather short and unsatisfactory. Seguin's experiments are referred to, which have, we think, been superseded by more reliable observations. Mr. Kingzett maintains that sweat is nothing more nor less than liquid exuded from the bloodvessels; we should strongly object to this from a physiological point of view. Sweat is no more a simply exuded fluid than bile or urine, and the apparatus for its secretion is quite as complex as for the elimination of either of these fluids. Mr. Kingzett further states that notwithstanding the undoubted change in composition of the blood effected by the processes going on in the skin, it is *not* converted from an arterial to a venous state. What evidence can Mr. Kingzett adduce to show that the blood contained in the superficial veins of the arm, which return blood from the skin, is not venous?

The chapter on the Composition of the Brain is an excellent one. It is preceded by a bibliography historically arranged, and the author then discusses the work done, whether valuable or otherwise, by each of the experimenters he quotes. He next proceeds to give the results he himself,

in conjunction with Dr. Thudichum, obtained from a most carefully conducted and protracted investigation into the subject. Here, again, however, we find Mr. Kingzett guilty of some inconsistency. At p. 278 he declares "brain-matter contains no fats properly so-called"; but on p. 283 he describes the alcoholic extracts as depositing buttery matter, and "last oily" matter, and states that these principles comprise "three classes of phosphorised and nitrogenous fats—the kephalines, myelines, and lecithin, together with cholesterine," &c. How is this discrepancy to be explained? Apart from this little defect, the account of the chemistry of the brain here given is by far the fullest and most complete we at present possess. We regret the author has not, whilst overturning the older statements in regard to the percentage proportion of the constituents of the brain, attempted to supply their place by tables and figures of his own.

## OUR LIBRARY TABLE.

*The Journal of Anatomy and Physiology, Normal and Pathological.* Conducted by Professors HUMPHRY, TURNER, MCKENDRICK, and CREIGHTON. Vol. xiii., Part 1; October, 1878.—In this number Dr. J. Cunningham gives an account of the Intrinsic Muscles of the Mammalian Foot. He arrives at the following conclusions:—1. That the typical arrangement of the intrinsic muscles of the pes is the same as in the hand, as is best seen in the feet of certain marsupials. In these animals there is a plantar layer of adductors, an intermediate layer of flexores breves, and a dorsal layer of abductors. 2. That the opponens muscle, the presence of which is not accounted for in the foregoing scheme, is either a development of the flexor brevis, or is associated with the adductors. 3. That in many animals the relation of the intrinsic muscles to the metatarsal bones, both as regards their origin and position, corresponds with transitory conditions in the foot of the human embryo. Messrs. Miall and Greenwood give an interesting description of certain parts of the anatomy of the Indian elephant, including the alimentary canal, generative organs, heart and vessels, and respiratory system. Dr. Creighton advances a theory of the Homology of the Suprarenal Bodies. Mr. Owen contributes a paper on the Anatomy of Genu Valgum. Professor Humphry describes the Growth of Bone from the Articular Cartilages. Mr. Slater gives the details of a Tumour of the Ovary in the common Pheasant; Professor Turner a note on the Placenta of the Hog-deer; and Dr. Urban Pritchard an excellent account of the Development of the Organ of Corti. Dr. Coats, of Glasgow, reports a case of Hemiplegia, involving loss of brain-substance in the motor region of the convolutions. Dr. Thomas Henderson gives an account of the Effects of Inhaling Phosphuretted Hydrogen; and there is a brief paper on Anatomy by Professor Rolleston. Lastly, there are various notes and abstracts.

*The Public Health Ireland Act (1878), with Schedules, &c.* Dublin: John Falconer. 1878.—This is simply a reprint of the Act, with headings, schedules, and a well-digested index, intended for the use of officers concerned in its administration. It varies in comparatively few respects from the Act of 1875 as it relates to England and Wales. The "medical sanitary officer" is now, by the 11th section, styled "medical officer of health." Section 15 vests sewers in the sanitary authorities; and power is given, by Section 26, to close such drains from private houses as are not suitable to the general drainage of the district. Sections 61 to 76 confers more extensive powers for water-supply upon sanitary authorities than are at present in force, and are also taken from the Health Act (England) 1875. And so on. Still, as this book does not pretend to do more than give a digest of the law, we have done enough to recommend those of our readers interested to buy the book rather than the Act itself, because, in the former, to anyone not a lawyer, the practical bearings of the enactment are very much simplified.

*The Cabinet Lawyer:* a Popular Digest of the Laws of England, Civil, Criminal, and Constitutional. Intended for Practical Use and General Information. Twenty-fifth Edition. London: Longmans and Co. 1878.—Without calling in question the truth of the old adage that "he who acts as his own lawyer has a fool for his client," we may be allowed to doubt whether all men are capable of knowing when they have a chance to play the fool. The "Cabinet Lawyer" is evidently designed to save men from their folly and to supply a want felt by Lord Bacon, when he said, "I wish every man knew as much law as would enable him to keep out of it." Though this popular work may not teach men sufficient law to keep them out of it, it does the next best thing: it gives a clear exposition of the state of the law, and enables the reader to decide when he should take "further advice."

## THE REVISION OF THE MEDICAL COUNCIL.

### IV.

BEFORE leaving the subject of the effectiveness of Recommendations by the Council, which really touch the fundamental and traditional habits of the teaching and examining bodies, we may suggest another test. In the discussions which took place last year with reference to the high number of rejections at the examining boards, a very general feeling was expressed that there was a want of some test by which students and their friends could judge of the way in which the student was attending to the most fundamental part of his work, such as Chemistry and Elementary Anatomy, before the end of the second year, which hitherto has been the earliest time at which an examination on professional subjects could be passed. It was felt that the lapse of so long a period as two winters left students without any near sense of responsibility for the use of their opportunities of study and work. The short way of meeting such a defect would have been for the Council to enjoin the institution of an examination at the end of the first year. So Mr. Simon proposed, seconded by Dr. Storrar. These gentlemen went so far as to move that such an examination should be "passed" at the end of the first year. In other words, that time spent after the end of the first year without passing this examination should not count in the period of medical study. This looked too much like determination for the Medical Council. Accordingly the Recommendation took the mild form of which the Council is such an unfortunate master. Dr. Humphry proposed that it is desirable that an examination in the earlier subjects of professional study should take place before the end of the first year of medical study. And the mild form was accepted. Our point is that, though eighteen months have elapsed, none of the examining bodies have established such an examination; and, moreover, we should very much like to know how many of the bodies in Schedule A have taken this resolution into consideration. It must be apparent that we need a Council which has the courage of its own opinions, and which should be supplied by law with supreme power in all matters touching medical education and examinations. Otherwise the proportion of rejections will continue to increase.

We come now to a matter of some interest—

THE COST OF THE MEDICAL COUNCIL.

This is of the more interest to our readers inasmuch as the whole income of the Medical Council is derived from the profession. The Council exists really in the interest of the State. It is a body for ensuring to the State the supply

of well-educated medical men. It is composed of Crown members, representing the State; and of other members, as we have amply shown, representing Universities and Corporations. Neither the State, represented by the Crown members, nor the Corporations and Universities, whose members so predominantly compose the Council, pay one farthing of the sums which we have thrown into a tabular form below. The table will enable our readers to see at a glance the kind of income which the Council receives, and the kind of expenditure which it enjoys. The expenditure is not stinted, but it long ago became evident that the Council would not be able to expend all its funds. As early as the year 1862 an Act was passed incorporating the Medical Council, and giving it power to hold lands for the purposes of the Medical Act. We are not aware that the Council has yet bought any estates, but it would soon be able to do so if it had real powers which took effect, and did not require to indulge in long and unprofitable discussions on the same subject year after year, and which are very costly. It has always been the boast of the Medical Council that it works by moral suasion—which means that it says at great length, and with much vagueness, one year, what it has said in the same way in some preceding year, without passing any resolutions binding on the bodies, and without any intention of reporting them to the Privy Council in the event of their non-compliance. The following table gives the Income of the Council from the commencement.

| Date. | Fees. | | | Dividends. | | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|
| | £ | s. | d. | £ | s. | d. | £ | s. | d. |
| 1859 ... | 34511 | 10 | 0 | ... — | | | ... 34511 | 10 | 0 |
| 1860 ... | 3204 | 10 | 0 | ... 749 | 11 | 0 | ... 3954 | 1 | 0 |
| 1861 ... | 4017 | 15 | 0 | ... 755 | 3 | 7 | ... 4772 | 18 | 7 |
| 1862 ... | 3787 | 15 | 0 | ... 768 | 17 | 1 | ... 4556 | 12 | 1 |
| 1863 ... | 4386 | 15 | 0 | ... 752 | 19 | 2 | ... 5139 | 14 | 2 |
| 1864 ... | 4520 | 10 | 0 | ... 761 | 3 | 9 | ... 5281 | 13 | 9 |
| 1865 ... | 3614 | 5 | 0 | ... 787 | 17 | 9 | ... 4402 | 2 | 9 |
| 1866 ... | 3653 | 5 | 0 | ... 784 | 6 | 9 | ... 4437 | 11 | 9 |
| 1867 ... | 3815 | 5 | 0 | ... 773 | 9 | 5 | ... 4588 | 14 | 5 |
| 1868 ... | 4087 | 10 | 0 | ... 747 | 5 | 0 | ... 4834 | 15 | 0 |
| 1869 ... | 3631 | 5 | 0 | ... 773 | 11 | 7 | ... 4404 | 16 | 7 |
| 1870 ... | 4130 | 15 | 0 | ... 811 | 2 | 10 | ... 4941 | 17 | 10 |
| 1871 ... | 3620 | 15 | 0 | ... 801 | 4 | 6 | ... 4421 | 19 | 6 |
| 1872 ... | 5033 | 5 | 0 | ... 800 | 19 | 0 | ... 5834 | 4 | 0 |
| 1873 ... | 4249 | 0 | 0 | ... 852 | 10 | 7 | ... 5101 | 10 | 7 |
| 1874 ... | 4532 | 0 | 0 | ... 885 | 14 | 3 | ... 5417 | 14 | 3 |
| 1875 ... | 4718 | 10 | 0 | ... 882 | 8 | 2 | ... 5600 | 18 | 2 |
| 1876 ... | 5143 | 0 | 0 | ... 874 | 13 | 9 | ... 6017 | 13 | 9 |
| 1877 ... | 4814 | 0 | 0 | ... 876 | 13 | 8 | ... 5690 | 13 | 8 |
| | 109,471 | 10 | 0 | 14,439 | 11 | 10 | 123,911 | 1 | 10 |

It appears from the above table, the materials of which will be seen in the Annual Register, that the Medical Council has received in nineteen years the goodly sum of £123,911 1*s.* 10*d.*, roughly about £6500 a year. This has come out of the pockets of the medical practitioners of the country before they had the chance of putting a fee into their pockets. Sir Dominic Corrigan puts it very well when he says it is a monstrous injustice that all the payments should be made by the practitioners of the country, and all the representation be enjoyed by the bodies in Schedule A, which pay nothing. There is a divorce here between payment and representation which cannot be justified and which must cease.

We submit that we have shown—first, that the constitution of the Council is theoretically wrong, inasmuch as it consists of the representative bodies, which are warped by traditional views, and are too much interested pecuniarily in existing systems of education and examination; and, secondly, that the Council, as a matter of fact, works badly, the crowning proof of this last statement being in the fact that after twenty years the Council has only touched the fringe of the great subject of medical education, and touched it so inefficiently that the proportion of rejections at examinations have doubled in fifteen years. The faults of the Council, as consisting predominantly of the representatives of interested bodies, are not counteracted, as it was originally, we believe, intended should be the case, by the Crown electing as its representatives persons unconnected officially with the corporations. The result of our review is the conclusion that the Council needs to be altered in its constitution negatively and positively, and that it needs to be endowed with power to enforce its recommendations. There will be differences of opinion as to how these alterations in the Council should be effected, but we may be sure that no alteration will be acceptable which does not give real power to the Council, and an assurance that it will be used to promote more thorough education. Coupled with provisions for securing this more thorough education there should be additional assurances in the nature and powers of the Council that false pretences and imposture should be more signally punished than at present. It is hard to be always exacting more from the educated, and never making the punishment of false pretence of education efficient.

# New Inventions.

## NEW PORTABLE SURGEON'S POCKET DRESSING-CASE.

THE surgeon's pocket dressing-case, of which the accompanying engraving (scale two-thirds size) is a good illustration, is an improvement effected by Messrs. Salt and Son, of Birmingham, on a somewhat similar arrangement recently introduced by them, and described in THE LANCET. The case is made of aluminium bronze, handsomely engraved, and silk velvet lined, and opens with a hinge like a portemonnaie; a flap is connected with the hinge, and on either side the instruments are arranged and are kept in position by elastic loops. Room is thus provided for four additional instruments, so that the contents of the case are as under: silver caustic case; probes; director; elongating female catheter; thermometer in case; exploring needle; small skin syringe, for concentrated solutions; folding scissors; spring forceps; sharp and blunt bistouries; Syme's knife; and tenotome—fourteen instruments in all. The instruments are sufficiently large for all practical purposes, whilst the entire case may be conveniently carried in the waistcoat pocket.

# THE LANCET.

*LONDON: SATURDAY, DECEMBER 21, 1878.*


## THE ILLNESS OF THE PRINCESS ALICE.

THE profound grief of the nation, and its sympathy with Her Majesty, make it a duty for us to publish the following facts concerning the illness which has ended in the death of one of the most favourite members of the Royal Family. We do so the more readily inasmuch as they seem to show that the disease, and the gravity of the attack, were promptly recognised, and that the Princess had throughout the advantage of the constant advice and attention of one or all of three well-known German physicians, and for the last day of her illness, the benefit of Sir WILLIAM JENNER'S presence and counsel, whose knowledge of diphtheria is as special as his knowledge of the constitution of his Royal patient. The illness lasted a week. On Saturday, the 7th, the Princess complained of sore-throat. The next morning Dr. EIGENBRODT recognised the diphtheritic nature of the throat affection, and treated it with much judgment. As the symptoms of the disease became more severe, Dr. OERTEL, of Munich, known as the author of one of the best articles on Diphtheria—that in ZIEMSSEN'S Cyclopædia—was called in, and stayed till the end. Dr. JAGERS, a physician of the hospital at Darmstadt, and a capable surgeon, was also summoned, and was in constant attendance. One or other of these gentlemen were present night and day. The local symptoms were severe from the first. The false membrane characteristic of the disease soon covered the soft palate, reaching to the hard, the pharynx, and the tonsils. There was great swelling of the glands under the jaw. From an early period too, there was considerable fever and constitutional disturbance. The temperature at times was as high as 104° Fahr. The Princess died on the eighth day of the disease. Her attendants became very anxious at finding in five or six days no abatement of the principal symptoms. But on Thursday—the day on which Sir WILLIAM JENNER, who had been detained twelve hours by an accident to the steamer, arrived—she was so much better that it was deemed advisable not to inform the Princess of his presence, and, though fully apprised of the facts from the time of his arrival, he did not see her till the Friday morning between 9 and 10 o'clock. She had had no sleep in the night, and the windpipe had become affected. Up to Friday the windpipe had continued quite free. But then symptoms of exhaustion and cardiac failure occurred. Death was caused by these, and not by mechanical obstruction of the larynx.

The first anxiety of English practitioners in such cases is to know that every care has been taken to uphold the powers of nature. We are glad to find that, throughout, this truly vital indication was duly regarded, and every means was used to support strength. But the failure of power, in spite of stimulants and nourishment and supporting medicines, which were all laid under contribution, was only too intelligible. There is a limit to the endurance even of such mothers and daughters as the Princess ALICE showed herself to be. The system attacked with the poison of diphtheria has, at the best of times, and under the best circumstances, a hard battle to fight. But to have this battle to fight in the depression of recent bereavement, in the weakness implied in having nursed with exquisite devotion her children and her husband, and in the atmosphere in which all this disease had happened, was to give nature and art almost a hopeless task. We can but be thankful that all that human means could do was done, and well done, from the beginning. We hope ere long to publish a report of all the cases in this unfortunate outbreak. Such lives as that of the illustrious Princess must not be lost in their prime without a historical record of the doing of the poison to which we owe her death and that of her beloved child. And we can extract no deeper lesson from her disastrous decease, nor one of which her enlightened and benevolent spirit would more approve, than to work with intenser effort to exterminate such forms of disease.

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IN accordance with the wish expressed in Dr. LYON PLAYFAIR'S question, upon which we commented last week, Colonel STANLEY consented to lay on the table of the House the remarks of the Board of Examiners on the Report by Lord CRANBROOK'S Committee on the Army Medical Department. These remarks are confined to the subject of the examination of candidates, the members of the Board stating that they have nothing to do with the general scope of the report and its recommendations, and do not presume to offer an opinion regarding them. They commence their observations with an analysis of the table in the Report showing the results of the competitive examination, and point out, as we did in our analysis,[1] that the great falling off in the number of candidates began in 1873. From a table which they have prepared of the examinations for the Indian Medical Service, it appears that no corresponding deficiency has occurred in the candidates for it, but that they have always exceeded in number the vacancies. From this they draw the conclusion that the examinations have had nothing to do with the scarcity of eligible candidates, but that service in the Army Medical Department has long ceased to be held worth competing for. With the latter part of their statement we fully agree, and, we presume, so do the War-office authorities, or Lord CRANBROOK'S Committee would not have been required; but we do not agree with them that the entrant examination has no deterrent effect. From the numerous letters we have received we are fully satisfied that it exerts a very considerable influence. The reason why this is not shown in the case of the Indian appointments is, we believe, because that service has so many prizes in the shape of civil appointments that candidates are willing to undergo the expense and annoyance of these examinations in the hope of securing an adequate reward. But such is not the case with army appointments, and until these are made better worth competing for, there will always be a dearth of candidates.

[1] See THE LANCET, Sept. 28th, p. 442.

The principal question, however, appears to us to be—Is the entrant examination necessary in the interests of the service? In supporting this view, the Examiners attach great weight to an admirable speech of the late Professor PARKES delivered at a meeting of the General Council of Medical Education and Registration in 1864. But, as a result, we believe, of that discussion, a marked change has taken place in the examinations of the licensing bodies, and a supervision is now exercised over them by the Medical Council which has to a great extent removed the causes of complaint referred to by him on that occasion. If, as we trust, the principle of the "one portal" of admission to the profession is carried in the coming session of Parliament, the objection referred to will cease to exist. We do not think it necessary to follow the Examiners in their defence of the nature of the examinations as conducted by them, because, even if we admit all they say on the subject, we still think the examination objectionable as being deterrent without any corresponding advantage to the service.

The ends to be attained by these examinations appear to be two: first, the exclusion of ineligible men—men who, although holding the double qualification, are deficient in practical knowledge and skill; and, secondly, placing the candidates on the list for commissions in the order of their professional merit. Now we think both these ends might be equally well attained without the entrant examination. During the four months' probation at Netley, under the very able staff of that school, surely such deficiency as would justify exclusion from the service could be detected much more easily and certainly than in the course of the entrant examination in London, and the position by merit could be well and satisfactorily determined by the professors. We do not think that any advantage is gained by the entrant examination at all sufficient to compensate for the deterrent influence which we firmly believe it to exercise upon the recently passed medico, or for the expense which it involves in the necessity for keeping up a special Board of Examiners. The Examiners appear to be particularly anxious to prove that, even when the number of candidates is less than the vacancies, the examination is not merely a "pass," but a competitive one. We confess to our inability to see the force of their reasoning, for, although, in addition, there is a classification of the candidates, the examination itself is only a "pass," and, as we have already stated, the places on the list could easily be determined at Netley. If Colonel STANLEY is prepared, by increased pay, allowances, position, honours, rewards, and the removal of existing causes of discontent, to make the service so popular that a superabundant supply of candidates will be induced to come forward, a competitive examination may, perhaps, hereafter be deemed necessary, or may be considered the most suitable mode of selection; but we fear that day is far distant, and until it comes, the question for him to consider is, whether it is advisable to continue a system which deters many suitable candidates from coming forward. However numerous the candidates may become, we trust nothing will ever induce the authorities to abolish the very valuable special school of instruction at Netley—a school the teaching of which enables young officers to join the service with an amount of special knowledge and practical skill which they can acquire in no other place; but we should like to see it utilised also, in the manner we have noted, to test the practical knowledge of the aspirants for commissions, and to decide their relative position on the list.

The Examiners state that "no good student ever dreads a competitive examination, if it is fairly and honestly conducted." This may be so, but we have known many object to one after having already gone with credit through those necessary to obtain the double qualification. A good student may fairly object to, without dreading, an additional examination which does not carry with it any great prize. We think also that the Examiners are going a little too far when they state that "these rejections have often been regarded as a benefit by the candidates in making them work up the subjects in which they were deficient"! We can only say, in conclusion, that a very careful perusal of the document has failed to satisfy us that the entrant examination has not in many instances a deterrent effect, and that the advantages arising from it are of such a nature as to compensate for its drawbacks.

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THE last two meetings of the Obstetrical Society were spent in the discussion of a paper by Dr. GEORGE ROPER "On Anteflexion of the Uterus." The author of the paper limited his observations to the congenital form of anteflexion and certain correlated conditions, one of which—namely, a somewhat narrow pelvis—is of the greatest importance in obstetric practice. In the discussion which followed the reading of the paper, however, a similar limitation was not observed, and anteflexion of the uterus generally was discussed; while prominence was given chiefly to the treatment of that condition. Though the chief and ultimate aim of the study of all diseases should be to acquire a knowledge of the means of prevention and of cure, yet it will be admitted, even by those who pride themselves on being "practical," that there are two ways by which the object in view may be attained. One of these is to search for a method of treatment for diseased conditions even when little or nothing is known of their pathological nature, the symptoms which they give rise to, and their ultimate effects—when, in fact, the natural history of the diseased conditions in question is unknown. This leads to what is known and recognised as "empirical" treatment, and can lead to nothing more than the alleviation of symptoms, or, by some rare and happy chance, to a method of cure. The second is to study the pathology of the diseased conditions, discover their causes, and trace their history, and by this means discover a method, not only of treatment, but also of prevention. The processes of the latter are, unfortunately, above or beneath the notice of the self-dubbed "practical" man, although it is not only the most practical method of the two, but also the most scientific, and the one that will lead to the most accurate knowledge and to the most permanent results.

It is greatly to be regretted that so much time was occupied in the late debate in discussing modes of treatment, as anteflexion of the uterus is a subject with regard to which such opposite and contradictory views are maintained by members of the profession; for while some authorities believe that anteflexion is a cause of severe suffering and numerous evils, others, again, not only doubt but deny the importance of the condition in question as a factor in uterine

disease. Under these circumstances, it was greatly to be desired that some part of the time should have been occupied in sifting the claim of anteflexion to be considered as a diseased condition. Curiously, however, though it is well known that difference of opinion prevails as to this question, there was a remarkable unanimity exhibited with regard to it in the late debate; and, with the exception of the few words which fell from the President, there was not a single observation made which could be interpreted as casting even a doubt upon what would from the debate appear to be the terrible character of anteflexion. In the course of the discussion several speakers asserted that anteflexion was a very common cause of dysmenorrhœa and sterility. It was, moreover, stated that the way in which anteflexion gave rise to these troubles was by bringing about a constriction of the uterine canal at the seat of the bend, that this narrowing prevented the exit of the menstrual fluid, which consequently was dammed back in the cavity of the body of the uterus; that dilatation of the cavity, congestion, and areolar hyperplasia of the body of the organ followed. At the meetings, when the discussion took place, Dr. ROPER showed two acutely anteflexed uteri, one from the museum of the London Hospital, the other from the College of Surgeons. Examination of these uteri, which had been divided antero-posteriorly in the median line, showed the following conditions: a canal, gradually curved at the seat of flexion, without any angulation; it was nowhere constricted, being as large at the seat of flexion as in the body of the organ; there was no dilatation of the cavity of the body, and no naked-eye evidence of congestion and areolar hyperplasia, for there appeared to be no evident enlargement of the body of the organ. The appearances presented by these two uteri are in accordance with what has been observed in the few instances in which anteflexion of the uterus has been met with post mortem. Anatomical examination does not appear to support the view that flexion of the uterus causes angulation of the canal and the evil consequences enumerated above. Clinical observation, moreover, made in women who have menstruated for fifteen or twenty years, and who have not borne children, but who throughout the whole of their menstrual life have suffered from dysmenorrhœa, and in whom the uterus is found on examination to be anteflexed, shows that the body of the organ is not appreciably larger than what is regarded as normal. And, indeed, this is exactly what anyone conversant with the arrangement of the bloodvessels in the uterus would expect, for with the vessels running outside the flexed organ in the folds of the broad ligament, and giving off branches which run transversely to the length of the organ, it is difficult to conceive how the circulation in the body of the uterus can be interfered with by even an acute anteflexion. Post-mortem examination of uteri in a state of anteflexion, anatomical observation of the course of the bloodvessels, and clinical observation appear to point to the one conclusion, which was not upheld by the speakers who took part in the recent debate, that anteflexion of the uterus does not interfere with the outflow of the catamenial discharge, and cannot give rise to congestion and areolar hyperplasia of the uterus.

In order to arrive at trustworthy conclusions with regard to the part played by anteflexion in the production of the evils attributed to it, it is necessary to exclude the presence of other conditions, which, it is admitted, produce similar results, for even the firmest believers in anteflexion will admit that such conditions exist. It is not enough to find anteflexion coexistent with dysmenorrhœa to establish any other relation between them than that of coexistence, yet it is to be feared that the simple discovery of anteflexion satisfies all the diagnostic ambition of many. It is thought that the proof of the causal relation between anteflexion and dysmenorrhœa is to be found in the result of treatment, and great stress has from time to time been laid upon the argument from treatment. This argument, however, requires the greatest caution in its use, for, unless all the conditions present be accurately known, it may prove extremely fallacious. But what really is the result of treatment directed simply to the cure of the flexion? Is it that the sufferings of the patient have been removed when the flexion has been removed, and the uterus maintained in a straight position? Certainly not. In some cases the dysmenorrhœa is cured, while in others it remains, although the uterus is perfectly straight; while in others, again, the dysmenorrhœa is cured, though the flexion remains in spite of the treatment directed towards its removal. Results of this kind must necessarily make an unbiased mind suspect that much greater evils are attributed to flexions than they are really guilty of. The result of treatment by stem pessaries, advocated by so many speakers at the recent discussion, is absolutely useless as evidence of the importance of anteflexion; for, though it is true that a straight stem introduced into the uterus and maintained there necessarily keeps the organ straight, yet it is equally true that its action is not limited to this. Indeed, according to the most earnest advocates of this method of treatment, the stem causes softening of the tissue of the uterus and dilatation of its canal, and, we may add, other effects, good and bad, all of which render the conditions present so complex as to make it impossible to arrive from this source at a trustworthy conclusion as to the part played by the flexion. We cannot, however, stop here. If it be true that anteflexion is a very frequent cause of dysmenorrhœa, sterility, and many other ills, it should be established by irrefragable evidence, for the means necessary to its cure are in many cases highly dangerous, occasionally fatal, and in all cases offensive. If, on the other hand, it be an unimportant and a normal condition of the virgin organ, then the sooner anteflexion is dismissed from our nosology, and ingenuity ceases to exercise itself in the invention of pessaries, intra-uterine stems, and surgical operations for the cure of only a supposed pathological state, the better. To settle the question finally, and to estimate correctly the importance or non-importance of anteflexion, patient investigation, careful research, and closer reasoning than characterised the debate in the Obstetrical Society are necessary. The proportion of women suffering from anteflexion, and the proportion of those again who suffer from dysmenorrhœa, should be determined; the proportion of women, whose uteri are not flexed, suffering from evils similar to those attributed to flexion, and the causes of their suffering, should also be decided. Many of the latter are obscure, and may remain undiscovered, but until the knowledge named has been attained, it will not be possible to form a correct estimate of the part played by flexions in diseases of women.

IT cannot be too strongly, or too constantly, contended that Medicine, in its modern development, is a science of prevention rather than cure. Search for the causes, and the discovery of means for the extinction or avoidance, of disease are the primary aims the physician of to-day proposes to himself, and upon which his industry and skill are chiefly concentrated. This is one reason why the investigation of morbid states, organic or functional, and the study of disease in its rise, progress, and results, with a view to obtain the largest and deepest insight into its nature, habits, effects, and methods of propagation, are enterprises of higher purpose, and incomparably more practical concern to the health and vitality of the people, than the mere looking for remedies. The ancient physicians, who wore out their days in the search for an elixir of life which should render the creature man invulnerable, and stave off death indefinitely, had a nobler, though mistaken, aim than that of the "art and mystery" which grew up in the stead of, and for ages crowded out of sight the thought of life and health preservation, when that was found, or seemed, to be unattainable. Unable to struggle against the forces of disease and decay, the discomfited practitioner began to devote his energies to the demolition of the enemy in detail. Baffled in the endeavour to maintain health, he betook himself to the combat of disease. Thereupon followed a long dark period, during which the men of physic busied themselves almost exclusively with the search for simples, and the devising of compounds, believed to possess the mysterious power of curing sickness or relieving pain. An erudite system of nosology doubtless grew out of the care with which diseases were observed and classified, mainly on the basis of their relation to supposed remedies, for the most part discovered by chance. Modern science is indebted to the unwearied labours of this epoch, but by far the largest share of the obligation grows out of the diligence and accuracy with which the physicians of that "practical" era in the history of medicine elicited and collected the *symptoms* of disease. Medicine in its modern development claims to re-enter the circle of the Sciences, and its pretensions are valid so far, and only so far, as its aim or function is prevention rather than cure.

It is of daily increasing importance that what may be described as the new, or more accurately the ancient but resuscitated character of scientific medicine, should be recognised, not only by students and practitioners, but by the public and the State. The preservation of health is not only a higher object, but a totally different object from the cure of disease. The latter must ever remain a mystery, within the exclusive ken of the profession. This is not an arbitrary resolution, but a necessity growing out of the fact that *scientific* treatment, and modern medicine knows no other, must, in the nature of things, ever remain inseparable from a knowledge of the organism, with its requirements and behaviour in health and disease, which can only be possessed by the expert who is devoted to the study of the cognate branches of science involved. As well ask a man wholly unacquainted with the facts and laws of meteorology to predict the rise, and work out the course, of a storm, as try to impart the power of treating disease to one who is ignorant of physiology and pathology in their subtlest relations. There are "weather prophets," and there are quacks, but we have nothing to say to either. It is manifestly as impossible as it is unprofessional to speak or write for the lay public on the subject of treatment. The case is, however, widely different in regard to the prevention of disease. It is, beyond question, the high vocation of the medical profession to preach the gospel of health. There must be a code of storm-signals intelligible to the masses, who are perpetually exposed to the gravest risks from the extension and progress of disease, and it is the bounden duty of the profession to embrace every legitimate opportunity and means of teaching and enforcing the humane lesson of an orderly and clean life, in soundness of body and mind. When, therefore, a State neglects, a people fail to recognise, or a local authority rejects, the precepts of health promulgated by the medical profession, contempt is poured on prudence, common sense is scandalised, and, be the consequences what they may, medical men, though as citizens themselves participating in the disastrous consequences of indifference, are absolved from the penalty of reproach.

We are induced to review these facts, and to raise the protest they involve, at the close of another year by a concurrence of circumstances which tend to show that, simple as the truth really is, the majority do not yet understand it, or are strangely disinclined to accept its obligations. In such matters as the removal of known nuisances and nests of diseases from crowded places of residence—for example, the riddance of cesspools and old, but newly-disturbed, drains, from the basement of Royal palaces, for the most part rotten remains of antiquity clumsily adapted to modern domestic requirements; the provision of perfect and easily-repaired systems of drainage and sewerage in public buildings, as recent as the last batch of Government offices and the new law courts at present in course of heedless construction; the observance of sanitary precautions in the gathering of multitudes of young children in Board schoolrooms without even the semblance of proper supervision in the interests of public health; the avoidance of such obvious perils as result from the flooding of populous districts by low-banked rivers; in the crowding of workhouses;—in all these, and a host of similar matters, the oft-repeated warning voice of Medicine is disregarded, and the suggestions of science treated as of no account. Public anxiety in relation to the health of the Sovereign and our Royal Princes is allayed by the perfunctory appointment of an occasional committee of inquiry, with no power to carry into effect its own recommendations. The heads of departments agree to "consider" when they are asked to act. And local authorities tell their medical officers they are employed to attend to the sick, "not to act as inspectors." All this is very regrettable and terrible in its consequences, discouraging to science, injurious to the public health, and detrimental to the national prosperity, and it all springs from a single cause—the failure to perceive that medicine is first, and in its highest purpose, preventive, not remedial. The aid it is able to render in sickness and the actual presence of disease, though considerable, is in no sense its chief glory or its primary and most useful aim.

AT a meeting of the Council of the Royal College of Surgeons, held on the 12th inst., Mr. Luther Holden, the senior Vice-President of the College, was elected a member of the Dental Board, in consequence of Mr. Savory declining to be put in nomination for re-election.

# Annotations.

"Ne quid nimis."

## THE HEALTH OF THE QUEEN.

IT will be gratifying to all her subjects to learn that Her Majesty's health is as good as it can be in the circumstances of profound grief into which the middle of December again finds her plunged.

## PATHOLOGY AT THE ROYAL COLLEGE OF SURGEONS.

THE authorities of the Royal College of Surgeons, having "done their duty by" Anatomy and Physiology, have resolved to make some provision for the younger sister, Pathology. This they are, happily, able to do by appropriating the Erasmus Wilson endowment for the promotion of "the study of pathology, together with the anatomy and physiology, human and comparative, of the skin and its appendages." A few strokes of the pen, and the transformation is complete! Leaving out anatomy and physiology, and omitting special reference to the skin and its appendages, the fund is cleverly diverted from Dermatology to Pathology, and Mr. Erasmus Wilson, the founder of the Professorship of Dermatology, enjoys the singular privilege and satisfaction of being the only Professor of Skin Diseases the Royal College of Surgeons has ever had, or is ever likely to have. Mr. Wilson not only found the money, but accepted the trouble and responsibility of inaugurating the first course of lectures, and generously continued to deliver each successive course, extending over a period of eight years. We are far from lamenting the change that has been made, provided it be clearly understood that Great Britain and Ireland contain more than *one* dermatologist.

In another column we publish the report of the President and Vice-Presidents of the College recommending the changes referred to. It will be seen that it is proposed that each holder of the new appointment shall for the time be entitled "Erasmus Wilson Professor of Pathology." Odd professor! whose lectures "must rather be deprecated than desired." One portion of the report is, however, worthy of special commendation—that is, where the great importance of original "research" is insisted on. May we hazard the hope that the outcome of the research shall not necessarily be *novelty*.

## YELLOW FEVER IN AMERICA.

THE report of the Yellow Fever Commission was presented and read at a meeting of the American Public Health Association, held last month. A thorough investigation into the circumstances of the first cases that occurred was made, with the result of convincing the Commission that the disease was brought from the West Indies, either by a steamship in May or by fruit vessels in June. The following conclusions were agreed upon:—In no solitary instance was there a case of yellow fever found which could be considered as of *de novo* origin or indigenous to its locality. In most of the towns visited, and which were points of epidemic prevalence, the testimony showing importation was direct in its character. The transmission of yellow fever between points separated by any considerable distances appeared to be wholly due to human intercourse. In some instances the poison was carried in the clothing, or about the persons of people going to and from infected districts. In other instances it was conveyed in cotton, bagging, or other goods of the same description. The weight of testimony was very pronounced against the further use of disinfectants. Physicians in infected towns, almost without exception, state that they are useless agents to arrest the spread of yellow fever, while some of them affirm that their vapours are seriously prejudicial to the sick. Personal prophylaxis, by means of drugs, &c., has proved a failure, although a few medical men have faith in quinine in small doses. Quarantine, established with such a degree of surveillance and rigour that absolute non-intercourse is the result, has effectually and without exception proved a protection against yellow fever. It is noteworthy that a special committee of the Public Health Association, to which the report was referred, refused to endorse the conclusion with regard to the value of disinfectants, and urged that an endeavour should be made to discover the actual *materies morbi*, suggesting a line of experiment by which such a result might be attained. An interesting statement bearing on the histology of yellow fever may be added here. Dr. I. G. Richardson found that the urine of the fever patients had shown a very rapid degeneration and desquamation of the tubal epithelium. In the kidneys the tubules and Malpighian tufts were much clogged with small organisms. They were so numerous as to have undoubtedly impeded the excretory process. In the blood Dr. Richardson had uniformly found dumb-bell bacteria, and his observations generally led him to believe that a thorough saturation of the system with an atoxic parasiticide, if such could be found, would prove of therapeutic value.

## LIFE-SAVING AT TWOPENCE-HALFPENNY A DAY.

THE sum at which the multitude of decent folk who amuse themselves with skating and sliding on the frozen water in the parks value the services of the Royal Humane Society, with its vigilant corps of icemen and ever-ready appliances for the recovery of the immersed or almost drowned, is, it seems, exactly *twopence-halfpenny a day*. The estimate formed, by implication, of the worth of the lives risked is certainly a modest one. The question arises whether, rating the number of persons engaged in the perilous exercise as low as we may, the figure at which they fix their own value is adequate. How completely the crowd on a sheet of ice must be dependent on such assistance as the Society provides, in the event of accident, has been abundantly shown by more than one melancholy calamity, and the risk incurred by individual skaters is daily illustrated. Surely it must be pure thoughtlessness that leaves the boxes placed in the parks for contributions comparatively empty. The danger besetting this healthful pastime is very great. Year by year we have to preach care as to the thickness of the ice and the depth of the water beneath, and to point out that, if a field of ice is not formed by continuous frost, but, so to say, built up in strata by successive freezings with intervals of thaw, it will have little more bearing strength than that of the most superficial layer. It is weary work pointing out perils and warning the public against them. The spice of risk is the seasoning of many a sport which without the danger would be voted tame. Nevertheless, it is incumbent on all who have an audience to inculcate the need of precaution, and to urge again and again that without the utmost watchfulness and consideration there must ever exist the direst risk.

## THE GOVERNMENT AND MEDICAL LEGISLATION.

WE are afraid from the tone of Lord George Hamilton's reply to Mr. Mills that the Government are again disposed to attempt piecemeal medical legislation; in other words, to deal with the question of Examining Boards separately from the question of the constitution of the Medical Council. This will be a great misfortune, not only because the question of a satisfactory examining board or boards for licensing

men to practise is as difficult and complicated a one as that of the Medical Council, but that the two questions hang together, and should be investigated and legislated on together. Moreover, legislation on the Medical Council need never be expected on this side of the millennium if it is not granted in connexion with a great attempt to put the Medical Acts into a state of permanent efficiency. The Government should sanction the appointment of a Select Committee. The circumstances of the present session are not favourable for permanent legislation, but they are favourable for a searching inquiry. There should be an inquiry into the whole subject, which is of great importance to the State, and of none to parties. The appointment of a Committee will remove the question from the region of party politics, as it deserves to be.

## THE RECENT PRISON CATASTROPHES.

SCARCELY has the excitement caused by the evidence adduced at the coroner's inquest in the case of the prisoner Nolan, whom the jury found to have died of "inflammation and congestion of the lungs, and that the said death was greatly accelerated by repeated and excessive punishment on bread-and-water diet," than we are startled with the report of the death of a suspected criminal at Winchester in the hands of the police. And if the evidence at the inquest is correctly reported by the local press—and its accuracy has not yet been impugned by the parties interested in the matter—there can be little doubt that the death in this case was greatly accelerated by the working of the New Prison Act. The facts of the case are briefly as follows:—William West, *alias* Samuel Burgess, was apprehended at Portsmouth, and taken before the Southampton magistrates on the 11th and 12th ult. Being remanded, he was conveyed to Winchester gaol, the Southampton borough gaol being closed under the provisions of the New Act. On the 19th ult. he was again brought to Southampton, where he underwent a lengthened examination before the magistrates; and when, after the adjournment for lunch, it was found that the prisoner was delirious, and it was not thought that he would live to get back to Winchester. Mr. Breary was called to see him the same afternoon, and found him insensible. On the 23rd ult. the prisoner was removed to the poorhouse, and subsequently died. Medical evidence clearly showed that he was suffering from advanced Bright's disease; and at the inquest one of the medical witnesses stated that "the change to Winchester was undoubtedly the cause of the man's death. This statement was supported by another medical witness—qualified, however, by the term "accelerated." Certainly the frequent removal from one place to another, especially in the winter season, of a patient afflicted with so serious a disease, was the worst possible treatment that could have been adopted; and it seems great inhumanity that an evidently dying man should have been thus dragged about. The authorities cannot plead ignorance as to the man's condition, for on being taken into custody the prisoner informed them that he had been out of health for some time, and had vomited a great deal of blood. Had the Southampton Gaol not been closed, the authorities, no doubt, would have been glad to have placed him there. The question we would ask, however, is, why was the man removed from Winchester on the 19th ult., when he was in such a manifestly unsound condition, for his second appearance before the Southampton magistrates? And we would further inquire if it be the intention of Government to provide accommodation for suspected criminals in the town where their trial takes place, instead of forcing on them the hardship, disgrace, and possible fatality of these frequent journeys? And, lastly, we would ask if, in the face of the recent disclosures, it is intended to carry out the proposed reduction of the medical staff (*vide* Appendix No. 5, first report of the Commissioners of Prisons) from 109 to 70? We have already stated that the new regulations are all on the side of severity towards the prisoner, and that many of them must be regarded in the light of experiment, and require closely watching. It seems altogether a false policy to add to the work of the already overtasked medical officers of prisons, which will be done by the closing of the borough gaol sending more prisoners to the central prisons. The additional work cast on the medical men of these institutions ought to be met by the appointment of highly qualified medical assistants, and we would strongly urge that the whole of the medical staff should be resident within the walls of the gaol. Certainly during the few months the Prisons Act of 1877 has been in force two serious catastrophes have occurred, unmistakably showing the weak points in the system, and indicating very plainly that its provisions have not been dictated by common sense, or even common humanity.

## HOSPITALS FOR INFECTIOUS DISEASES.

SANITARY progress depends to so great an extent upon the provision and proper use of hospitals for infectious diseases, that any evidence of the subsidence of the prejudices standing in the way of the full utilisation of these institutions has a distinct value. Dr. Hill, the medical officer of health for Birmingham, in his last quarterly return, acknowledges the service rendered by the local medical practitioners in furnishing information as to the existence of zymotic disease, and in advising the removal of their patients to the borough hospital when necessary. Dr. Hill expresses a hope that this co-operation on the part of the medical profession may become more general; he rightly believes it to be indispensable to the success of the efforts of the sanitary authority to control the prevalence and fatality of zymotic disease. Birmingham, as well as its neighbouring townships, especially Harborne and Oldbury, have recently suffered severely from epidemic scarlet fever, and Dr. Hill reports that 139 cases of this fever were removed to the borough hospital for infectious diseases during the three months ending September last, against but 13 in the corresponding period of last year. Indeed, Dr. Hill adds:—"Such large numbers of cases have recently been removed that there is good reason to believe that it will soon become necessary to take into consideration the erection of more wards for the treatment of cases." This looks hopeful, although there is little reason to doubt that similar readiness to isolate the early cases would have spared several hundreds of lives that have been sacrificed to scarlet fever within the borough during the present epidemic. Dr. Hill reports that during the third quarter of this year 304 deaths in Birmingham resulted from scarlet fever, against but 48 and 41 in the corresponding quarters of 1876 and 1877; and during October and November the disease within the borough was still more fatal than in the preceding three months.

## PITURI.

DR. SIDNEY RINGER and Dr. Murrell have lately been investigating the action of Pituri, and have published the results of their observations in the *Journal of Physiology*. It is believed to be obtained from a plant growing in Australia, and named the Duboisia Hopwoodii, a solanaceous plant. The natives, it is said, fortify themselves during their long foot marches by chewing the leaves, just as the Bolivians employ for the same purpose the leaves of the coca. Dr. G. Bennett states that pituri is a stimulating narcotic, and it appears to be used as a substitute for tobacco. It is generally met with in the form of dry and pulverised leaves. The natives first chew about a teaspoonful of them, then mix the mass with the ashes of some

burnt twigs, and place the bolus behind the ear to increase its strength, after which it is again chewed and swallowed. When indulged in to excess it is said to induce a condition of infuriation, and in persons not accustomed to its use pituri causes severe headache. In 1872 Dr. Bancroft, of Queensland, read a paper before the Philosophical Society of that colony, and attributed the following effects to the drug: A period of preliminary excitement from apparent loss of inhibitory power of the cerebrum, attended in cats and dogs with rapid respiration, vomiting, and profuse secretion of saliva; irregular muscular action, followed by general convulsions; paralysis of the respiratory function of the medulla; death or sighing respiration at long intervals; rapid respiration and returning consciousness; normal respiration and general torpidity, not unattended with danger to life. Drs. Ringer and Murrell have arrived at the conclusion, from their experiments, that the pituri alkaloid is remarkably similar to atropia, and that it is slightly narcotic, that it first salivates and then dries the mouth, and that it dilates the pupil when administered internally or applied topically to the eye. They further find, in accordance with Dr. Bancroft's experiments, that it is a powerful respiratory poison. It produces general weakness and violent twitchings of the whole body. They show that pituri resembles in its more prominent effects gelseminum and jaborandi. Through jaborandi pituri becomes allied to muscarin, which possesses the same action as jaborandi, except that muscarin administered internally contracts, but topically applied dilates, the pupil. By means of pituri, therefore, alkaloids can be grouped into alliances so dissimilar as atropia and jaborandi, and atropia and muscarin—two alkaloids which, in most of their effects, are antagonistic to those of atropia.

## ANOTHER BIRMINGHAM INQUEST.

IN THE LANCET of last Saturday we called attention to the singular conduct of the Birmingham Coroner in not ordering a post-mortem examination in the case of a man who was brought in dead to the Queen's Hospital, and in which the house-surgeon, Mr. Jordan Lloyd, very properly refused a certificate as to the cause of death without having first made such an examination. We have received from Mr. Lloyd a full statement of the case, which, in our opinion, fully justifies him in refusing to give any opinion without first ascertaining, by post-mortem examination, the absolute cause of death.

The same Coroner has, during the last week, acted in a precisely similar manner in the case of a man who is said to have taken poison, and whose life was found to be extinct when he arrived at the Queen's Hospital. Dr. Wood, one of the resident physicians, wrote to the Coroner, stating that "he was unable to ascertain the cause of death without making a post-mortem examination. If he (the Coroner) wanted one made, he would kindly give an order." The Coroner, in charging the jury, said that he had not given an order, as it appeared to him quite unnecessary, and gave as his reasons that he would take care that unnecessary fees were not paid by the Town Council, and that the duty of the jury was not to constitute itself "a College of Physicians and to define with extreme nicety every stage which ended in death. That was all very well for the faculty, but it was never intended that the Coroner should undertake such duties."

Such a strange definition of a Coroner's duties has seldom been heard before, and in the interest of the Birmingham public it is right that the Coroner should be made to understand that without the evidence of medical witnesses, founded on such thorough pathological and chemical investigation as can alone be afforded by a properly-made post-mortem examination, the inquiry into the cause of death by a Coroner's jury becomes a delusion and a farce, and the sooner some more scientific as well as practical method of inquiry in cases of sudden death is instituted the better will it be for the safety of the British public.

## SCHOOL-SHIP SANITATION AND THAMES SEWAGE.

MR. NETTEN RADCLIFFE has recently presented an important memorandum, prepared at the request of the Secretary of State for the Home Department, to Dr. Seaton, medical officer of the Local Government Board, on the sanitary state of the school-ship *Cornwall*, moored on the Thames off Purfleet. The inmates of the vessel, three years ago, were the subjects of a very severe epidemic of typhoid fever, which, although not very fatal, actually affected nearly 50 per cent. of the occupants of the ship, including officers and domestics, and ultimately cost the society, which subsists in a great measure on voluntary contributions, upwards of £3000. As regards this particular outbreak, Mr. Radcliffe simply reports that he is unable, from the defective condition of the returns, to go into the special particulars of the epidemic, but that he believes the disease (as also other infectious diseases) to have been imported from the shore, and agrees generally with the conclusions and recommendations of the port medical officer, Mr. Harry Leach, who had before reported to his own committee the particulars that he was able to glean from observations made during the progress of the epidemic. The chief immediate interest of the report, however, centres in its third clause, which discusses the question as to whether the now notorious main drainage outfalls at Barking and Crossness had much or anything at all to do with the rise and progress of the disease. Mr. Radcliffe says:—

"The *Cornwall* is moored close to the shore *seven* miles below the metropolitan sewage outfall at Barking, and *five and a half* miles below the sewage outfall at Crossness. On 18th August, 1877, in company with Mr. Harry Leach, I witnessed from the river the flow of sewage into the stream. The day was peculiarly favourable for observation. The surface of the water was hardly disturbed, and then only at intervals, by a gentle current of air from west-south-west, so that it was practicable to follow the movement of the sewage at the surface with the greatest precision. It was about two hours of ebb-tide when we reached the Barking outfall. Sewage was flowing thence in a broad, black, offensive stream, carrying much floating nastiness on the surface. The sewage hugged the near bank of the river until it reached the mouth of Barking Creek, when it was deflected towards the centre of the stream, spreading out fan-like at the same time. The sewage then flowed along mid-stream, the current rapidly breaking up and becoming dispersed, and a mile below the outfall, opposite the powder magazine just above Crossness point, it was entirely lost to sight, not even a trace of the floating matter being discoverable, although several casts backwards and forwards across the river at this part of its course were made in search of it. On approaching the Crossness outfall, three-quarters of a mile below the point where all trace of the sewage from the northern outfall was lost to the sight, the odour of sewage met the nostrils in advance and the southern sewage stream, carried upwards in part by an eddy, was entered a little above the outfall. The sewage had the same aspect as that from the northern outfall. It hugged the southern bank in a broad well-defined current for three-quarters of a mile, then, opposite the Belvidere Guano Works, it broke up into several branches and spread out towards mid-river, and a quarter of a mile below, opposite the powder magazine there, all traces of sewage were lost to sight. That the suspended matters of the sewage which finds its way into the Thames both above the metropolitan area towards the source of the river, and below the metropolitan area at Barking and Crossness, are *equally distributed* within the section of the river selected for examination (viz., from Vauxhall to Greenhithe); or that each successive outflow of sewage at the Barking and Crossness outfalls undergoes so great a dilution and dispersion as *practically to become unrecognisable* on the cessation of the flow from any deposit of suspended matter it contained. In

either case sewage matter in solution may be regarded as an almost inappreciable quantity, and ignored accordingly."

Mr. Radcliffe proceeds to argue that it forms no part of his inquiry to determine which of the alternatives mentioned is most probable. If the former, the *Cornwall* is moored in no unhealthier a position than other school-ships in the Thames, and it is not known that the health of the boys in these ships has suffered from their position; if the latter, it is unlikely that the boys on the *Cornwall* are exposed to any injurious influence from the outflow of metropolitan sewage at Barking and Crossness. The ultimate conclusions arrived at by Mr. Radcliffe, founded on the available evidence, checked by elaborate analyses prepared by Dr. Dupré, are to the effect that the *Cornwall* was probably not on this occasion influenced by the sewage from the outfalls, and that at present there is no evidence which leads him to conclude that the outfalls affect the health of the boys—at all events more than the boys of any of the other school-ships moored in the Thames. It must be remembered, however, that none of these floating establishments are as yet moored (or, we believe, are likely to be moored) within the limits specially spoken of by the inspector as being influenced by the sewage. Other parts of the report are, however, important as bearing generally on the question of the main-drainage outfalls, but we can hardly suppose that any officer of the Local Government Board would insist that the discharge of the sewage of the metropolis into the Thames at these, or, indeed, at any other points, is other than an objectionable method of disposal. This report comes very opportunely now, when the outfall question is being discussed, and should be compared with all that has been written and reported on the subject, from the Conservancy, the Metropolitan Board of Works, and the Port Sanitary Committee of the Corporation.

## CORONER'S WORK IN KENT.

THE unequal distribution of work among existing coroners, and the varied interpretation of their duties and responsibilities, are among those incongruities which promised legislation respecting coroners should aim at removing. In the county of Kent, for instance, it appears that twenty-one coroners and five deputy coroners hold office; five are coroners for the county, and the rest are appointed for cities, boroughs, and liberties within the county. Yet in Kent the amount of coroner's work, judged by the number of inquests held, is in inverse proportion to the number of coroners. It appears from the Registrar-General's Quarterly Return for the three months ending June last that only 131 inquests were held during the quarter by these twenty-one coroners, averaging little more than six per coroner. Whereas in the whole of England and Wales the proportion of inquest cases to total deaths was equal to 5 per cent., it scarcely exceeded 3 per cent. in Kent. It is not difficult to explain this difference. In England and Wales the number of inquests held exceeds the number of deaths referred to violence by more than 50 per cent., whereas in Kent, while 128 deaths were referred to violence during last June quarter, only 131 inquests were held. It follows, as a matter of course, that in many cases of violence no inquests were held; and we propose to mention, as examples, two of such cases which are to be found in the death register of the West Ashford registration district. On 11th May, the son of a deceased grocer, aged fourteen years, died at Egerton from "fracture of the skull, eleven days;" and on 10th June a farm-labourer, aged fifty-three years, died at Westwell from "injury to the spine and pelvis, two days." No inquest was held in either of these two cases of violent deaths, the cause of death being certified in each case by the same registered medical practitioner. It must be presumed the local coroner decided that it was unnecessary to hold inquests in these cases, and it is by no means certain that an inquest is necessary in every case of violence; it is, however, a manifest injustice to the public if in some districts coroners deem it right to hold an inquest on every such case, while in others an ordinary medical certificate is held to be sufficient evidence of the cause of death. It becomes important to inquire whether too few inquests are held in Kent by its many coroners, or whether inquests are unnecessarily numerous in most other parts of the country.

## PRIMARY EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

A MEETING of the teachers of anatomy and physiology was held in the Board-room of the Charing-cross Hospital, on Monday last, at eight P.M., under the presidency of Mr. Thomas Smith, of St. Bartholomew's Hospital. Most of the metropolitan schools were represented, and letters were read from all the schools in the provinces. Everyone present expressed his opinion with regard to these examinations, and, without exception, it was thought that some change should be made in either that for the Membership or for the Fellowship, or in both.

It was finally arranged that the Council should be memorialised on the subject, and that a sub-committee should draw up a memorial, which should embrace the following points: an increase in the number of questions, an extension of time at the *viva voce* at the discretion of the examiner, the definition of the amount of comparative anatomy required for the Fellowship, and the separation of examiners into examiners in anatomy, physiology, and comparative anatomy. It was rumoured at the meeting that the Board of Examiners had already decided to divide itself into examiners in anatomy and in physiology respectively. We would suggest, in addition, that the system of marking be improved, and we do so the more strongly since it is now settled that a candidate who does not obtain half-marks shall be referred for six, instead of for three months. There is scarcely sufficient margin between the candidates who obtain, under the present system, four and five marks, and it would be more satisfactory if these were multiplied by fifties or hundreds, so as to show an appreciable difference.

## HEALTH OF WHITECHAPEL.

MR. JOHN LIDDLE, medical officer of health for the Board of Works, Whitechapel district, gives, among other particulars detailed in his last quarterly report, a very interesting account of vaccination operations, as performed by the public vaccinator for the district, Mr. Blackman, and also by Mr. Ilott, the resident officer of the workhouse. From these records it appears that for the three weeks ending September, 1878, Mr. Blackman performed 480 successful operations, the largest number ever accomplished in a single quarter, with the exception of that ending March, 1871. This total, together with those performed by Mr. Ilott, brings up the proportion of successful vaccinations, as compared with the total number of births, to 98·6 per cent. Mr. Liddle considers this very favourable result as, in a great measure, due to the course recently adopted by the guardians in carrying out a system of house-to-house visitations. "Four visitors were employed during several weeks, 8826 dwellings were visited, and 929 persons were reported as unvaccinated. But of the latter number about one-half are stated to have been under the age of four months, and presumably under the cognisance of the vaccination staff, and there were a still further number of cases of lawful postponement."

One of Mr. Liddle's inspectors found in the course of domiciliary visits a school-room 12 feet by 12 feet and 8 feet in height, accommodating nineteen persons, thus giving only

60 cubic feet to each. It was used as a sleeping-room at night, and the court in which it was situated had three public privies at one end, and a public dustbin at the other, all within a few feet of the room in question. Overcrowding in school-rooms seems to be a somewhat frequent occurrence in Mr. Liddle's district, but in no case has he been compelled to take legal proceedings, explanation and remonstrance always resulting in a diminution in the number of pupils, or the enlargement of the school premises.

## UNCERTIFIED CAUSES OF DEATH IN LARGE ENGLISH TOWNS.

IT appears from the last Quarterly Return of the Registrar-General that the proportion of uncertified causes of death continues to decline, especially in the large towns. In twenty of the largest English towns the proportion of deaths registered without the production of the certificate either of a registered medical practitioner or of a coroner, which had been equal to 2·9 and 2·6 per cent. in the first two quarters of the year, further declined to 2·4 per cent. in the three months ending September last. The proportion of uncertified causes of death in these twenty towns during last quarter did not exceed 1·1 per cent. in Portsmouth and 1·3 both in London and Plymouth, whereas it was equal to 4·4 in Norwich and in Sheffield, 4·5 in Salford, 4·6 in Oldham, 5·1 in Wolverhampton, and 6·1 in Bristol. The Registrar-General reports that the proportion of uncertified causes of death has recently shown a marked decline in Nottingham, Sheffield, Salford, Oldham, and Wolverhampton, although it is still excessive in most of these towns. The large proportion of uncertified causes of death in Bristol is said by the Registrar-General to call for investigation "at the hands of the local medical practitioners and of the medical officer of health." We have reason to believe that, at any rate in Nottingham, the decline in the proportion of uncertified causes of death is to a considerable extent due to the local attention directed to this important matter by the medical officer of health. In some of the smaller towns the proportion of uncertified causes of death continues to show a serious excess. For instance, it is reported to have been, during last quarter, equal to 19·7 per cent. in Durham, 20·4 in Helston, 20·6 in Keighley, and 24·5 in Redruth. Uncertified causes of death almost invariably signify unqualified medical practice in some one or other of its various forms, and, in the interest both of the public and of the profession, any marked excess in the proportion of those uncertified deaths deserves the serious attention of coroners, medical officers of health, and, indeed, of all registered medical practitioners.

## THE HOSPITAL SUNDAY FUND.

THE annual meeting of the constituents of the Fund at the Mansion House, under the presidency of the Lord Mayor, on Wednesday, the 11th inst., was a very satisfactory one. The action of the Lord Mayor in the matter of the offices of the Fund apparently is not meant to imply any want of sympathy on his part. He spoke as if he would heartily rejoice in the success of the collection during his year of office. The expression of feeling on the part of the clergy and ministers of all denominations was also unmistakably hearty and favourable. The movement is really valuable as a means of bringing together men of the most diverse creeds in real harmony for one great religious purpose. So perfect was the good feeling that it was not at all disturbed by two or three knotty questions being thrown into the general discussion. The Rev. Mr. Rowsell probably surprised the meeting as much as Sir Sydney Waterlow by his allusion to the large income of St. Bartholomew's as a reason which weighed with some people for not giving liberally to the Hospital Sunday Fund. It would, no doubt, be a matter of public interest to know exactly what is done with the large revenues of Bartholomew's, and how far it goes to relieve the wants of the sick poor. But the annual meeting of the Hospital Sunday Fund was scarcely the occasion for introducing such a big subject. Sir Sydney was not disturbed, and had no difficulty in assuring his audience that the patients in Bartholomew's were well treated, and that no delicacy even which might be prescribed was withheld from them. He had still less difficulty in satisfying the meeting that the Council of the Hospital Sunday Fund does rightly in withholding a grant to the Hospital for Incurables as a hospital to which admission is obtained only by votes, and in which the cure of disease is not attempted. The bad times were readily accepted as the explanation of the fund being smaller than in the previous year. Probably this is part of the explanation. But the Council should bestir themselves. They display a little too much readiness to blame the times and acquit themselves for the sum being altogether too small to represent the Christianity of London in relation to the hospitals of the metropolis. The new offices of the fund are 1, Queen Victoria-street, Mansion House.

## "NURSING" AND "DOCTORING."

THE proper and sole functions of the nurse are to minister to the personal needs and comfort of the sick, and to carry out the directions expressly given by the medical attendant. When any discretion beyond the simplest and most obvious exercise of common sense is left to a nurse, confidence is misplaced, and a grave error committed. The practice of leaving anything to the discretion of nurses in regard to the administration of medicines is, we trust, extinct. The nurse who gives a dose of physic "out of kindness" is not to be applauded or even excused, but rather condemned for a breach of discipline and the usurpation of functions wholly apart from her own. We are entirely in accord with the remarks offered by Dr. Hardwicke at a recent inquest, in which a nurse gave seven drops of laudanum "out of kindness." It is most important that the nurses of hospitals, infirmaries, and the sick wards of workhouses and other institutions, should not be allowed to give medicine to patients under any pretence, or on any occasion, except expressly directed to do so.

## SANITARY ASPECT OF MEDICAL CERTIFICATES.

FEW of the numerous and various forms of medical certificates which it is the misfortune of the medical practitioner to be constantly called upon to fill up have a more direct bearing upon public hygiene than medical certificates of the cause of death. These certificates, which are at the same time compulsorily and gratuitously furnished to the State, supply one of the most important facts entered in the national death-register, and form the basis of perhaps the most essential part of our system of mortality statistics, that which deals with causes of death. The medical officer of health, in the absence of the registration of infectious sickness, depends upon the death-certificates for the first intimation of zymotic fatality; the value of these documents as an aid to effective sanitation cannot, therefore, be overestimated. It is to be feared, however, that at times there is a sore temptation to lose sight of the public utility and value of these certificates in the supposed interests of the relatives of deceased patients. It appears difficult in any other way to account for the unsatisfactory manner in which some causes of death are certified. The Registrar-General recently, without comment, called attention to the following facts:—During October four deaths of children occurred in one house, 71, Lucy-road, Bermondsey; all four cases being

certified by registered medical practitioners. The death of a female aged five years occurred on the 6th, and was referred to "convulsions"; on the 13th that of an infant aged eleven months to "teething-diarrhœa and tonsillitis"; while on the 16th and 21st the deaths of two other children were certified as the result of scarlet fever. There seems to be almost more than probability that all four of these deaths, instead of only the last two, were the result of scarlet fever. Indeed, the certificate referring the death of a child aged five years simply to convulsions is unsatisfactory, even supposing that there was no good ground for attributing the death to scarlet fever. If, however, this death on the 6th October was in fact a fatal case of scarlet fever, it is impossible to estimate the amount of mischief that may have been caused by the failure so to certify it. It appears that not until the third death in the house occurred, on the 16th, was the cause of death certified as scarlet fever, and not till then would the medical officer be in possession of the necessary information of the fatal prevalence of scarlet fever in this house and street. The success of efforts to control the prevalence and fatality of zymotic diseases depends in great measure upon the accuracy of medical certificates of the cause of death, and it is on this account of the first importance that the public health aspect of these certificates should not be overlooked.

## A CIVIL ENGINEER'S VIEW OF SANITATION IN LIVERPOOL.

OUR contemporary, the *Insurance Gazette*, takes note of an interesting lecture on this subject delivered several weeks ago at the annual meeting of the Association of Municipal and Sanitary Engineers and Surveyors by Mr. G. F. Deacon, C.E. He remarks that, excepting the soil upon which the town is built, there is nothing in the physical geography of the district calculated to produce an abnormal death-rate. The soil, however, is unfavourable, for, though there is rock, this rock (the new red sandstone) is overlaid by a thick bed of the absorbent but nearly impermeable boulder clay of the glacial period. So that before the borough was almost entirely covered with buildings and pavements a large portion of thirty inches of rainfall was absorbed into the boulder clay by capillary action rather than by percolation, was slowly restored to the air when rain had ceased, and produced an abnormally damp climate. One chief cause of the increase of mortality in Liverpool is due to the fact that many seafaring men come to the port in a bad state of health, go into hospital or to lodging-houses, and die there. Mr. Deacon points out that a comparison of the death-rate with that of Glasgow and Manchester shows a balance slightly in favour of Liverpool; and that this town, as to deaths from zymotic diseases, holds the eighth place among the eighteen chief towns usually referred to in the Registrar-General's report. The present death-rate of the town, as compared with the previous five years, indicates a diminution of 46 per cent., whereas in the other seventeen towns it is only 23 per cent. The "visible causes for so exceptional a change" appear, according to Mr. Deacon, "to be the thorough ventilation of eighty-one miles of sewers in the very heart of the town, the thorough cleansing of forty-four miles of these sewers, the reconstruction of some 300,000 square yards of pavement (formerly pervious, and now rendered impervious), the cutting off of the connexions between 1851 drains in the cellars of court houses and the main drains, and an almost universal pneumatic separation between drains within and without buildings of all classes." Also, a large number of "insanitary cellars" (? what is a sanitary cellar) have been closed under the advice of the medical officer of health, and during the last eighteen months 2178 of the remaining privies had been converted into genuine watercloset. And, lastly, the speaker called attention to the very important fact that since the beginning of 1876 no intermittent water service has existed in Liverpool, whilst the flooding of watercloset-drains has been rendered much more adequate, and this, too, with financial saving. It is well that we should look at sanitary matters from the points of view of an engineer, as well as of those of a health officer.

## THE NATIONAL QUARANTINE ACT IN THE UNITED STATES.

THE advantages derivable from this Act are so many and various that no apology is needed for again drawing the attention of our readers to its eminently practical provisions. Dr. Woodworth, Surgeon-General to the United States Marine Hospital Service, who is charged with its administration, compiles and distributes every week an abstract of the sanitary reports received by him during the previous seven days from all parts of the States, as well as from foreign sources, so that in proportion as the scheme is perfected in general organisation, and the telegraph is freely used, that report should and will give a very fair idea of the sanitary condition of all civilised countries, as exemplified in the present prevalence, severity, and fatality of the chief zymotic diseases. The last report, dated from Washington, New York, is chiefly occupied, as usual, with statistics about yellow fever in the Southern States, but includes also particulars as to the disease at Bermuda, and its possible importation into England by a ship which left there on the 22nd ult. Notes about cholera in Japan and China are also recorded as late as the 2nd ult., and the general vital statistics of Europe are given, as well as those of Vienna, Hamburgh, and Great Britain. But the administration of this Act commenced, if we are right, only about six or eight months ago, and, as we have before recorded, the Act should be *international*, and would then vastly assist to destroy some of the old, odious, and useless quarantine regulations that still exist in many countries (indeed, we are sorry to record, in most of our colonies), and would also aid most materially in showing how much of zymotic disease is propagated from one country to another by means of the shipping. Great Britain should, as the most prominent insular nation in the world, have set the example, but having failed to commence a national, may still have the credit of establishing an international system, based upon certain principles indicated at the three congresses held severally in Paris in 1851, in Constantinople in 1866, and in Vienna in 1874.

## CONTROL OF HÆMORRHAGE IN AMPUTATION AT THE HIP-JOINT.

MR. ALFRED PEARCE GOULD performed the operation of amputation at the hip-joint on the 7th inst. at Westminster Hospital. The patient was a young man, aged twenty-eight, in whom Mr. Gould had previously resected the joint. The hæmorrhage was controlled by an original device of Mr. R. Davy's, and so completely that only about three ounces of blood were lost. Mr. Davy compresses the common iliac artery by introducing a straight wooden rod, with a bulbous end, carefully into the rectum for about nine inches. The whole length of the rod is about twenty-two inches. It requires, of course, considerable knowledge to apply this instrument accurately and to use it harmlessly. But in skilful hands, the slightest elevation or depression of the handle, when once the instrument was brought to bear on the vessel, was enough to stop or to allow the flow of blood.

We were struck with the complete anæmia of the stump when Mr. Davy lightly raised the handle of the stick. Notwithstanding the slight amount of blood lost, the patient unfortunately died on the fourth day after the operation. The post-mortem examination showed that the parts where

pressure had been applied to control hæmorrhage were quite uninjured. The chief morbid appearances were extensive thrombosis of the veins of the opposite limb, extending into the common iliac vein.

## THE CONJOINT SCHEME.

THE Conjoint Examination Scheme proceeds with halting steps. When Mr. Hancock proposed at the last meeting of the Council of the Royal College of Surgeons (12th inst.) "That until the medical authorities in Scotland and Ireland respectively shall have agreed to establish Conjoint Boards in those divisions of the United Kingdom, it is not expedient for this College to take further steps towards the voluntary establishment of a Conjoint Board in England," the following amendment, moved by Sir James Paget and seconded by Mr. Marshall, was put as a substantive motion, and carried:—"That the President be requested to call an extraordinary meeting of the Council, for the consideration of the position of the College in relation to the institution of Conjoint Examining Boards as soon after the reassembling of Parliament as he shall think fit."

## THE RUSSIAN COUNTRY DOCTOR.

READERS of Wallace's "Russia" will remember the gloomy picture he drew of the position of medicine in the provinces of that empire. The Russian journal, the *New Times*, has recently discussed this subject in an article entitled "Medicine in the Country," and depicts even a gloomier picture than that drawn by Wallace. It shows the medical man a victim to petty vexations, to work which no amount of energy can accomplish, and to resources so limited as to involve almost penury. The condition of things, as affecting the medical man in the district of Kaliagine, is cited as an example. This district has a population of 100,000, scattered over many hundred square versts. The locality ought to possess, according to the regulations in force (for in Russia there is no question of other than official service in these cases), five medical men, one appointed for the district, one for the municipality, and three salaried by the zemstvos. In place of five, the district has but *one* medical man to render all required medical services. "It is obvious that this unfortunate, while leading the life of a galley-slave, cannot fulfil his task." At the best the zemstvo doctors quickly break down under their enormous tasks, and they withdraw disgusted with work which, while murderous to them, benefits no one. Then the salaries given by the local authorities, ranging from 1000 to 1500 roubles (at the highest value from £150 to £230), is wholly insufficient to provide for the reasonable wants of the man, particularly if he have a family, under the "crushing labour" to which he is subjected. Moreover, while his material existence is not thus properly assured, the exercise of his functions is often rendered intolerable by the conduct of the local authorities, who are too apt to deal arbitrarily with questions of hygiene and public health, and who regard the medical man as a servant who is bound to execute their orders without question. The *New Times* urges that the country medical man should be assured of independence in the performance of his special duties, and of an income reasonably proportionate to the work he is called upon to perform.

## WAKES AND SMALL-POX IN DEPTFORD.

THE 17 deaths from small-pox in London last week included 11 in the Metropolitan Asylum Hospital at Deptford, and 6 in private dwelling-houses; of the latter 5 occurred in Deptford, 4 being of children under five years of age. With regard to this outbreak of small-pox in Deptford, Dr. Brewer, the Chairman of the Metropolitan Asylum Board, writes to *The Times* that he has traced a large proportion of the cases to a wake which was held over the body of a child that died from small-pox in Deptford about five weeks since. The fact of the holding of a wake upon the body of a deceased small-pox patient affords an unfavourable commentary upon the vigilance of the local sanitary authority. It is satisfactory, however, to know the true cause of this outbreak of small-pox in Deptford, which too many would be very glad to attribute to the Metropolitan Asylum Small-pox Hospital, situated in that locality.

## THE FŒTAL HEART.

A NOTE on the action of the fœtal heart has been communicated to the Académie de Médecine by M. Laveran, the conclusions of which are:—1. That the heart of the embryo of the chick begins to move as soon as it is formed, and when it is a simple bulging tube. Its pulsation may be detected by the twenty-sixth hour of incubation, and sometimes even sooner. Thus, the heart alone, of all the organs in process of formation, begins its functions as soon as it is formed. At this period the different protoplastic constituents of the heart are indistinguishable—i. e., they have not assumed the characters of muscular and nervous structures. Nevertheless, the contractile property is from the first evident—a new proof of the functional autonomy of the property of contractility. 2. The cardiac pulsation commences, at its first appearance, at the venous portions of the heart—i. e., at the part which afterwards becomes the auricule. This is the part in which, as Bichat stated, pulsations are last perceptible on the death of the heart; the *ultimum moriens* is thus the *primum se movens*. This is also the first part to contract in each systole of the perfect heart, which commences by the venous and auricular parts, and ends by the ventricular and arterial parts.

## THE WEST BIRMINGHAM PROVIDENT DISPENSARY.

A PURELY self-supporting dispensary, which has the support of a goodly number of the consulting physicians and surgeons of Birmingham, and which has already fifteen acting medical officers, has just been inaugurated at Birmingham. It is intended for clerks, assistants, mechanics, and domestic servants, who are unable to pay the usual professional fees for themselves or families. The payment is to be one penny per week. Each member may choose his or her medical officer from the acting medical staff, and all registered medical men resident in the district may be placed on the staff, subject to the approval of the committee.

The committee is to consist of six medical officers and six members, elected at the annual meeting, together with the president (the Rector of Birmingham), the treasurer (Dr. Marshall), and the secretary, Mr. W. M. Fisher, who has for many years done good service to the town as the honorary secretary of the Hospital Sunday fund.

## CREMATION.

PROFESSOR GORINI is, it is stated, "superintending the erection of a funeral pyre on a site belonging to the Cremation Society of London. The pyre is on the same system which has been approved in numerous cremations at Milan and other places in Italy." The works at Knap-hill will doubtless be all that could be wished by those who approve the system. The Sanitary Council of Munich is reported to have recommended cremation under certain circumstances:—"1. After battle. 2. During certain epidemics. 3. Where the transport of bodies is difficult. 4. Where the soil is unsuited for inhumation." The most serious objection to cremation is the destruction of evidence

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in cases of poisoning, and the contingent facility offered for the commission of crime. This opens a very grave consideration, and it will be necessary to devise some means by which this difficulty may be obviated before the recourse can be entirely approved. That need exists for the adoption of some mode of disposing of the dead in populous countries other than interment, as carried out in past times and at present, in civilised countries, cannot be doubted; but the measures taken must necessarily be such as to ensure the maintenance of health without creating a new peril to life, such as would be created by the systematic and general use of the very method to which criminals, and particularly poisoners, have had recourse to destroy the traces of their iniquity.

## FEVER AND CELLAR DWELLINGS IN BELGRAVIA.

THE Registrar-General notes, in his last weekly return, that the death of a child, aged five years, occurred on the 11th inst., at 95, Westbourne-street, Belgravia, situated within the sanitary district of St. George, Hanover-square, and was referred to "typhoid fever, fifteen days." This child is reported to have died in a "cellar totally unfit for human habitation." There is something most grimly grotesque about such an occurrence within the precincts of Belgravia; and the question naturally suggests itself, whether it would not be possible for local sanitary authorities, their medical officer of health, and sanitary inspectors, to prevent the habitation of cellars before they become fever-nests.

## CHANGES IN THE PARIS HOSPITALS.

IN consequence of the retirement of MM. Fauvel and Noel Guéneau de Mussy from the post of physician to the Hôtel Dieu (these gentlemen having attained the limit of age prescribed by the Paris Hospital regulations), several changes are about to take place in the *personnel* of the Paris Hospitals. The two posts at the Hôtel Dieu will be occupied by MM. Empis and Moutard-Martin. Professor Chauffard goes from Necker to La Charité; M. Gombault from La Pitié to Beaujon; M. Ollivier from Lariboisière to Necker; M. Constantin Paul from Saint Antoine to Lariboisière; and Brouardel from Saint Antoine to La Pitié.

## ROYAL MEDICAL SOCIETY.

THE following gentlemen have been elected office-bearers for the current session:—Presidents: C. W. Cathcart, M.A., M.B., C.M.; Charles Begg, M.B., C.M.; G. Sims Woodhead, M.B., C.M.; Albert Wilson, M.B., C.M. Hon. Secretaries: E. H. Greves; Ed. Fowler Scongal, M.A., L.R.C.S. Library Curator: Frederick Cox. Museum Curator: William Fligg.

WE are called to urge the claims of "The United Kingdom Benefit Association," a charity in aid of persons belonging to the upper and middle classes who have fallen into reduced circumstances. Annuities are granted in relief up to the amount of £25. Members and connexions of members of the medical profession are among the annuitants. Subscriptions to the general fund may be sent to the secretary, W. Hart, Esq., 4, Berners-street, W., and contributions towards the Christmas gifts, which will be distributed directly to the candidates (medical if desired), may be sent to the hon. sec., Miss Kirby, Beckenham.

THE death of M. Henri Gintrac, the dean of the Bordeaux School of Medicine, has been greatly regretted, not only in Bordeaux, but throughout the profession in France. M. Henri Gintrac enjoyed the respect of his *confrères* on account of his many great qualities, and was unusually liked for his amiable disposition. He had well supported the name and celebrity of his father, the great Bordeaux physician, Dr. Elié Gintrac, and earned for himself the reputation of an eminent teacher and consulting physician. He was the author of several medical publications which are highly esteemed in France, the principal of which are his "Essay on the Diagnosis of Abdominal Tumours," his "Chemical Observations on the use of Injections of Iodine in Ascites;" his "Essay on the effects of strong doses of Tartar Emetic;" his "Observations on the size and measurement of the Chest in relation to Tuberculosis," &c. The successor to Dr. Gintrac, as Dean of the Bordeaux Faculty, has just been appointed in the person of Dr. Denucé, the well-known Bordeaux physician.

THE *Contemporary Review* for December contains a number of articles on the Alcohol Question, in continuation of those which have already appeared. Those in the present number are by Sir W. Gull, Dr. Murchison, Dr. Moxon, and Dr. Wilks. We understand that other articles are forthcoming in the January number, by Sir H. Thompson, Dr. Risdon Bennett, Dr. Radcliffe, Dr. Quain, Mr. Brudenell Carter, and others; so that there will be no lack of views, variously expressed. We shall refrain for the present from any criticism of these papers, in order that we may the better compare them at a later period.

THE *Opinione*, the leading journal of Italy, says:—"We announce with pleasure that Dr. Guido Baccelli, the illustrious professor of Clinical Medicine in the University of Rome, has been nominated an honorary member of the Medico-Chirurgical Society of London. This news will be received with lively satisfaction throughout Italy. Science is an essential part of the life and civilisation of every country; and the honours which great scientific bodies confer on Italian *savants* cannot fail to be gratifying not only to the persons singled out for distinction, but to the country of their birth."

DR. BIRT DAVIES died at his residence in Birmingham on the 11th inst. He was coroner for the borough for thirty-six years, retiring in 1875, and it is said that during the whole thirty-six years he did not miss a single inquest or take a single holiday. Dr. Davies was formerly senior physician to the Queen's Hospital and Professor of Forensic Medicine and of Clinical Medicine in Queen's College. He was seventy-nine years of age.

M. BARDOUX has just conferred the distinction of *officier de l'Académie* on the medical gentlemen who were attached to the medical service of the Paris Exhibition. Dr. Ladreit de la Charrière, the head of the department, has been nominated officer of the Legion of Honour for his services on the same occasion.

THE deaths registered in London last week numbered 1698, representing an annual rate of mortality of 24·8 per 1000. There were 17 fatal cases of small-pox, 34 of measles, 46 of scarlet fever, 14 of diphtheria, 47 of whooping-cough, 33 of different forms of fever, 11 of diarrhœa, and 501 of diseases of the respiratory organs.

THE French Minister of Public Education has just signed a decree appointing a new School of Medicine to be established in Toulouse.

DR. MAREY, the well-known professor at the Collége de France, has been elected a member of the Academy of Sciences.

THE Executive Committee of the General Medical Council met on the 11th inst., and will meet again shortly.

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## THE PARKES MUSEUM.

A LETTER signed by the chairman and honorary secretaries of the Parkes Museum, which we were reluctantly compelled by press of matter to exclude from our columns last week, brings forcibly before the readers of THE LANCET the aims and the needs of that institution. When founded, some two years since, it was intended merely to be a local memorial of Dr. Parkes in the college where he had been educated, and in which he had taught others. The scheme of founding a Museum of Hygiene is one which has met with so much favour with persons unconnected with University College, that the original promulgators have resolved, wisely, as we think, to make the museum national or central rather than local in character, and to appeal more widely than heretofore for pecuniary and other forms of help.

We cannot doubt that the appeal which has been made will be liberally responded to, and that all classes of the public will be ready to follow the example which has been set them by the Queen and the other members of the Royal Family, who have liberally contributed to the endowment fund.

The council of University College have placed a large room temporarily at the disposal of the committee, in which the nucleus of a collection is being formed. The temporary nature of this accommodation, as well as the space necessary for the adequate display of articles connected with so wide a subject as hygiene, which is naturally very great, render it a matter of certainty that the committee will be confronted at no very distant date with the necessity of erecting a suitable building for the reception of the collection. Apart from this fact, the income necessary for the maintenance of a museum is by no means small, for furniture and specimens have to be bought, a curator has to be paid, catalogues have to be prepared and printed, and the building and its contents have to be kept clean.

The necessity of collecting a considerable sum of money is, indeed, obvious, and we can but wish the Executive Committee all imaginable success in their efforts to promote so laudable an object. Since the museum is henceforth to assume a national rather than a local character, the Executive Committee will, we doubt not, see the necessity of adding to their number a few gentlemen unconnected with its place of origin; and, as an earnest of their intentions, we are glad to see that Dr. Sieveking has been appointed a trustee. The advantages of a museum of this nature are too obvious to need enumeration. Who, we may ask, has not been worried by the thousand-and-one defects which are daily manifested in our household arrangements? Which of us, for example, has not longed in vain for reliable information as to the best means of remedying a smoky chimney or checking the effluvia arising from an ill-constructed drain? Instead of being at the mercy of some tradesman who is interested only in the sale of his wares, or of some inventor whose enthusiasm gets the better of his judgment, the person in search of information will find in a museum of this kind a collection of apparatus designed to obviate or remedy the defect which is annoying him, and he will be able at his leisure to compare one with another, and possibly come to some wise conclusion in the end.

The extended prospectus of the museum, which has been prepared for the committee by Mr. Twining, gives an excellent *resumé* of the ends and aims of hygiene, and shows how far these are capable of visual illustration. Many of the classes into which the articles exhibited are divided have necessarily very little to do with medicine proper, but others will be chiefly of interest to medical men, and we trust that the profession will accord its cordial co-operation in rendering the medical sections of the Parkes Museum as complete as possible. It is hoped that the museum will become a depository for sanitary documents of all kinds, and that medical officers of health, hospital registrars, and others will forward their reports in order that comparisons may be made and the preparation of extended statistics be facilitated. It is hoped that in time the plans and elevations of every hospital in the country will be deposited here, and that the student of hygienic architecture will find abundant material for his instruction. It is intended also to form a collection of views, plans, &c., showing the position and surroundings of noted sanitaria, bathing and watering-places, and of other localities which are frequented by invalids, and which physicians are often in the habit of recommending, without any very accurate knowledge. Medical geography and topography will, we trust, be adequately represented, and form an important and acceptable section. One class is devoted to personal hygiene and the hygiene of invalids, and in it will be collected various articles, concerning which medical men receive, as a rule, no systematic instruction, such as dental, aural, ophthalmic, and orthopædic appliances, together with models of sick-beds, couches, chairs, and invalid furniture. This class will include also the various methods of conveying the sick and wounded in time of war, and other details connected with active service in the field.

Any of our readers who make contributions to these classes will know that by so doing they will be helping to diffuse a practical knowledge of various matters which, valuable though they be, can hardly be learnt from books. A museum is necessarily a thing of slow growth, and depends for its success upon the hearty co-operation of all classes. Those, however, who visit the Parkes Museum, as we have done, will find that the collection is already assuming considerable proportions, and that nearly every department of hygiene is represented. We were particularly struck with the collection of faulty sanitary apparatus, which has been contributed by Professor Corfield, and which cannot fail to teach many a useful lesson. We were glad to learn that immediate steps are to be taken for throwing open the collection to the public, and for turning to practical account the not inconsiderable sanitary library which forms an integral part of the museum.

It is intended to give a series of demonstrations in the museum—clinical lectures, as it were, upon sanitary apparatus,—to which those who are practically engaged in sanitary work, such as plumbers and the like, will be invited, and there can be no doubt that much good will result from such a course.

We understand that Professor Corfield intends giving the first course of demonstrations early in the ensuing year, and will take House-drainage as his subject.

The late Dr. Parkes was accustomed to teach that hygiene was essentially a practical matter, and the museum which bears his name, tending as it will to diffuse a practical knowledge of hygiene amongst all classes, is a most fitting memorial of one who was among the brightest ornaments of our profession and our country. Whether the museum be regarded merely as a fitting memorial of one who was worthy of our highest regard, or as a practical means to an end, it is equally worthy of the generous and ungrudging support of all branches of the medical profession.

## THE PRINCESS MARY'S VILLAGE HOMES.

THE very sad loss sustained by Her Majesty and the members of the Royal Family at the close of last week naturally excites an increasingly profound interest in the dire disease that has caused so much sorrow and distress in the Royal circle at Darmstadt. This, however, is not the only household that has felt, and is now feeling, the grave peculiarities of the malady—so grave as almost to rival scarlet fever in the insidious nature of its origin, rise, and progress. And hence it was with feelings of great regret that we heard recently of the existence (and, indeed, the somewhat vigorous, or, at all events, persistent spread) of diphtheria in the Princess Mary's Village Homes at Addlestone, a charming village in Surrey, some twenty miles from town. These homes were founded eight years ago by Mrs. Meredith, are arranged exclusively on the cottage system, and are intended for the reception of female children from almost any age to sixteen years, none being rejected on the ground of bodily infirmity. There are at present eight cottages or homes, each presided over by a "mother," and accommodating ten persons. The other buildings consist of schools, laundry, infirmary, exercise-room, bath-house, offices and stores, each and all being isolated, the entire estate occupying about three acres and a

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half, and the total population consisting of about 240 persons, mostly of the female sex. Until the month of October in the current year the health of the inhabitants was remarkably good. The report of Dr. Mouat and Captain Bowly, R.E., who inspected the establishment about a year ago by request of the Local Government Board, recites that, since its opening, out of 208 children only four deaths have occurred severally from congestion of the lungs, heart disease, and infantile convulsions. As these gentlemen remark, "the standard of health is very high." But unhappily, on the 1st of October, Dr. Sealy, medical attendant to the school, was called to a case of diphtheria, and up to the date of our visit, which was made on the 14th inst., no less than forty-eight cases had occurred, only four of which were adults. None have proved fatal—due partly to very excellent nursing; and comparatively few appear to have been severe; but the persistent character of the epidemic, and the apparently mysterious way in which it has attacked the inmates of many houses in general, and few houses in particular, points to a common cause which undoubtedly ought to be discoverable. It is proper at once to record that in the prosecution of our inquiries we were most politely escorted over the buildings by Miss Cavendish, one of the honorary managers, and accompanied by Mr. E. L. Jacob, medical officer of health for the combined districts of Surrey, without whose aid these notes could not have been compiled.

We visited first one of the houses in which all the children were well, and looked healthy and happy. A glance at the dormitories gave us an immediate impression of crowding, if not overcrowding, and a subsequent examination of the plans contained in Dr. Mouat's report showed an allowance of less than 200 cubic feet to each child. Neat iron bedsteads and flock mattresses are the rule. There are two day-rooms, one being used as a dining-room and the other for general purposes. The establishment is supplied with water from the West Surrey Works, and there is a large tap at one angle of the grounds, from which, as we understand, all the water is obtained, as it is not laid on to each or any house. It does not appear that the rain-water collected is utilised for any other than laundry purposes. The scavenging arrangements may here, as elsewhere, be classed in three divisions as to disposal of—(1) excreta, (2) slop-water and liquid kitchen refuse, (3) storm-water; and all the arrangements are a little peculiar. (1) As to excreta it appears that the contents of the pails, covered with ashes, are collected every day, and taken off to a plot of garden ground about a quarter of a mile from the Homes, and are at once utilised as manure. (2) The slop-water is emptied into a grated receptacle at the corner of the yard of each house, which grating is said to be trapped below. These grating openings communicate with drains which course to the main sewer, which sewer ultimately discharges itself into a meadow some eighty yards from the nearest part of the Homes estates. This meadow acts as a sponge, receiving all the slopwater, absorbing as much as it can, and leaving the rest to accumulate about the lower parts of the meadow in small and unsavoury pools, the smell from which in summer must be, and according to the evidence of Miss Cavendish is, sometimes offensive, being minimised or intensified in accordance with the direction of the wind. (3) A small square grating is fixed in the middle of the yard of each house to receive the ordinary surface drainage and rainfall, and we were informed by the engineer of the estate that each of these was provided with a bell trap, which he evidently considered all-sufficient. The ultimate destination of this storm-water was declared to be the meadow that receives the slop-water, and it is said that there is no connexion between the pipes of the one and those of the other.

There is one section of buildings immediately adjoining the school-room appropriated to the accommodation of ladies who reside there, as the last annual report explains, "for the purpose of literary study." In the building there is a bath-room, and if the epidemic could be traced to any of those who used this room, a distinct, if not satisfactory, solution of its origin could be, as we think, given; for the discharge-pipe has been known on several occasions to have conveyed an offensive smell to the bath-room, indicating that it was improperly trapped, not trapped at all, or not disconnected; and some general but rather serious defects below were noticeable, which will be at once remedied.

In endeavouring to arrive at the proximate cause or causes of the outbreak—i. e., the importation of the first case—very little positive evidence is at present forthcoming. One of the ladies above referred to as being at the Home for literary purposes is said, some days before the occurrence of the first case, to have returned home with a "sore-throat," did probably kiss some of the children, and so might possibly have conveyed the disease into the school. An analysis of the cases shows that out of the 48 recorded 13 out of 19 houses produced some, varying from 1 to 9 cases in each cottage; so that the disease has been spread promiscuously over most of the cottages on the estate, thus indicating pretty clearly a common cause of infection.

Mr. Jacob has examined the water and finds that no contamination occurs after its delivery from the main. Dr. Sealy, medical officer to the Homes, seems to think that the disease was imported from without, because, as he writes, several cases of sore-throat have occurred lately in the village of Addlestone, which, in common with many other places in the district, is in a chronic insanitary state, because no system of drainage exists. We demur, however, to the statement that the condition of the cottages and infirmary is altogether satisfactory, and are somewhat surprised that the Government inspectors did not take cognisance of the exceedingly small and manifestly insufficient cubic space accorded to each child in the sleeping rooms, as well as in the infirmary. We take leave to doubt also whether the slop drains and those used for carrying off the surface and storm water are properly trapped, and do not communicate with each other between the cottages and the meadow into which both finally discharge. This meadow outfall is a curious, and, to us, in the latter part of the 19th century, a novel mode of slop-refuse disposal, and we are at a loss to conceive under whose directions such a peculiar system was inaugurated. As a rough and ready method of getting rid of objectionable material, it has merits, but on sanitary grounds we object to it entirely.

The above remarks sufficiently indicate to our readers, and to those interested in the welfare of the institution, the weak sanitary points; and it is hardly in our province to point out the remedies, seeing that the district possesses in Mr. Jacob so very able and energetic a medical officer of health. It is, however, a duty to advise the managers to give up the outdoor pupil system, even if some pecuniary loss is sustained thereby. For in this and analogous cases it is manifestly fraught with much danger and great discomfort, because these intruders may, and undoubtedly will, to a greater or less extent, bring into the schools several varieties of minute carnivora, as well as other "catching complaints," much more easily introduced than eliminated.

Meanwhile we desire in all sincerity to commend this institution to the kindly notice of the charitable public as one of the best conducted establishments of the kind that it has been our lot to visit.

## ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following report on the Erasmus Wilson Endowment was presented and adopted at a meeting of the Council held on the 12th inst:—

In accordance with the resolution of the Council of June 6th last, the President and Vice-Presidents have carefully considered with Mr. Wilson, in what form it might be agreeable to him, and desirable for the College, to give effect to the principle, already accepted between them, that the scope of his endowment should be enlarged; and the President and Vice-Presidents now beg leave to submit to the Council a scheme, approved by Mr. Wilson, for certain such modifications of the Trust as would, they believe, enable the endowment to produce its best and most far-reaching effect.

Before stating the scheme, the President and Vice-Presidents would briefly explain certain restrictive considerations which, in framing it, they have had to bear in mind; for, as they need hardly submit to the Council, the problem of the best possible use for this endowment of £150 per annum is not an abstract question without regard to time and place and circumstances, but is essentially a question of adaptation to the College, with due regard to its special functions and to arrangements which are already in force for them.

Thus, first, as regards the question of subject-matter, the President and Vice-Presidents, considering what resources the College already possesses, and what provision it has al-

AVAILABLE

ready made, for the teaching of *Anatomy and Physiology* on the one hand, and of *Practical Surgery* on the other, have, on the whole, thought it best to assume that at present no further claim in either of those directions could be entertained; but that the special subject of *Pathology*, conceived as a distinct third division of College teaching, would undoubtedly be judged the most proper field to receive benefit from Mr. Wilson's endowment.

Proceeding then to consider in detail, what, within that province, would be the most advantageous application of the Fund, the President and Vice-Presidents first find, among the conditions of the case, that lectures, in any considerable number, must rather be deprecated than desired; for the College establishment will not bear more than a limited total number of lectures; and that limit would certainly be exceeded if more than a very few lectures on account of Pathology were added to the thirty which the College already has on account of Anatomy and Physiology and Surgery. This reason, even were there no other, would sufficiently forbid the founding of any Professorship in the College for the systematic teaching of Pathology *in extenso*; while equally strong reasons of another kind are suggested by the fact that courses of Systematic Pathology are presumably now given, of private enterprise, in all the medical schools of the United Kingdom. It appears then to the President and Vice-Presidents that, since lectures to be given under Mr. Wilson's endowment could not suitably be more than very few, the principle of the Trust in this respect should be: only to accept such (few) lectures as would be necessary to tell the results of original researches recently made by the lecturer himself in some department of Pathology; or, in other words, that the promotion, not of lectures as such, but of researches which would give original material for lectures, should be taken as the aim of the expenditure.

The Presidents and Vice-Presidents think it quite superfluous to insist that genuine research in pathology is of supreme interest to the profession. They take for granted that the promoting of such research would universally be regarded as among the fittest and most fruitful functions which a great corporation, with means at its disposal, could fulfil. They believe, too, that the Council of the College, having regard to the great and constantly increasing activity which several foreign countries are showing in that field of science, would wish to see members of the College distinguish themselves more largely than at present as contributors to the total of European work. It is of course well known to the Council that many of the younger members of English medical schools are already more or less inclining themselves to pathological research, and that some seem to be zealously interested in it; and it has appeared certain to the President and Vice-Presidents that encouragements and inducements, which the Council, by means of Mr. Wilson's endowment, could appropriately hold out to members of the College who should be successful workers in pathology, would operate as a most valuable influence over the whole of that field of work.

Accordingly, with regard to the annual appropriation of income from Mr. Wilson's endowment, under such enlarged conditions of trust as are proposed, the principles which the President and Vice-Presidents, with Mr. Wilson's approval, would recommend to the Council for acceptance are the following:—(1) that the field of application be pathology; (2) that within this field the special aim be to encourage original research; (3) that lectures be not an object of the scheme except as means for first promulgating from time to time results which the researches have gained; (4) that payments out of the fund be assigned quite subordinately to the lectures as such, and be mainly applied to remunerate the research; (5) that the persons to be benefited out of the moneys of the trust be members (including Fellows) of the College, not being at the time members of the Council.

If Mr. Wilson, in consent with the Council of the College and with the trustees of his endowment, proceeds to give effect to the principles which have been stated, the fundamental change to be made in the Trust-deed would apparently be as follows: that, whereas the original intention of the endowment was "to promote the study of Pathology, together with the Anatomy and Physiology, human and comparative, of the Skin and its Appendages," the new Trust would withdraw the special reference to Anatomy and Physiology; would provide that the trustees may promote not only "the Pathology of the Skin and its Appendages, but in general any studies which are for the advancement of Pathology in any of its relations or parts;" and would direct the trustees "especially to promote the making of original researches in Pathology by members of the Royal College of Surgeons of England, and the publication of the results of such researches by lectures to be delivered in the College."

The mode of giving effect to the suggested Trust not only would not need to be of like detail in all circumstances, but would certainly from time to time require its details to be varied. It would evidently be essential that, as regards the individual persons and researches to be benefited under the Trust, the administrators should (within the fixed conditions) be at liberty to vary from year to year the bestowal of money, and should be responsible for judging from year to year to what particular aim or aims the money could most usefully be applied. There would be times when they could do nothing better for the purpose of the Trust than reappoint, year after year, some specially diligent original investigator, who would give to the College on each new occasion a fresh harvest of pathological discovery; there would be other times when one man would in one year complete whatever present usefulness he could render under the Trust; there would be yet other times when the best arrangement for the year would be that two men or three, each representing a minor research, should each give a single lecture on his work. The administrators ought to be free in all such respects as those; and moreover, since there might now and then be an absence of acceptable matter for their purpose, they ought also to be free, where seeing fit, to refrain partly or wholly from expenditure of their year's income, on condition of adding the unexpended moneys to the capital account of the Trust.

The general plan of action then for the intended purpose must apparently be, that the Council would at some fixed time in each year publicly invite new candidatures for engagement under the Trust, giving notice of the intentions and limitations of the endowment, and requiring each candidate to furnish, to such extent as should be needful, information with regard to the pathological research he has made, and on which he desires to lecture, and with regard to the results which he has ready for promulgation. And among the general conditions to be notified, the following would, in the opinion of the President and Vice-Presidents, be desirable:—(1) That the year's lectures do not exceed three in number, but, subject to that limit, may, if the Council should see fit, be on more than one research, and by more than one person; (2) that the fact of having once or more lectured under the Trust does not disqualify to be again appointed; (3) that the Council, if not receiving applications which it deems acceptable, may refrain from making any appointment; (4) that the remuneration for persons appointed by the Council will be (*a*) to receive, in respect of the lecture or lectures delivered, an honorarium of five guineas per lecture, and (*b*) to receive, in respect of the research lectured on, such sum as the Council, having regard to the value of the research and to the expenses incurred for it, shall, after delivery of the lecture or lectures, see fit to award.

The Presidents and Vice-Presidents recommend that, if the scheme which they submit is carried into effect, the Council should, in all matters relating to it, advise with a special Standing Committee to be appointed for the purpose; and they suggest that, if this course be taken, Mr. Wilson, while he may be willing and able so to act, should be a permanent (supernumerary) member of the Committee. Also, feeling sure that the Council would wish to distinguish the new Trust by the name of its very liberal founder, they suggest that each person holding appointment to lecture under the Trust should for the time be entitled "Erasmus Wilson Professor of Pathology."

## ALBUMINURIC RETINITIS DURING PREGNANCY.

*To the Editor of* THE LANCET.

SIR,—With reference to Mr. Macnamara's cases published in THE LANCET of December 14th, the following brief notes of a case under my care may be interesting; at least, Mr. Macnamara, to whom I have shown them, wishes me to send them.

A lady, aged thirty-four, with a family and personal history of puerperal eclampsia, being seven months gone, had

a convulsion, and the day but one following four more; she complained of headache, neuralgia of the face, and of her sight having become dim for a day or two before the first fit. She often saw visions as of figures moving, which distressed her not a little. In the right eye, which was the worse, vessels appeared healthy but tortuous in the papilla, which was red and undistinguishable from the rest of the retina, and a small white spot was seen below the situation of the yellow spot. The fundus of the left eye was similar, but I did not detect any white patches. The urine was alkaline, and contained three-fourths albumen and numerous granular casts. Sight improved somewhat, also the headache and neuralgia, and eleven days after the first convulsion labour came on. The child had evidently been dead some days. Patient made a good recovery. The sight rapidly improved, and the albumen had diminished to one-fourth about three weeks after the confinement.

This case presented many points of interest, to which I will not allude here, especially as it will, I hope, be brought before the profession on another occasion.

I am, Sir, yours, &c.,

THEODORE MAXWELL, M.D. Camb., B.Sc. Lond.

Woolwich Common, Dec. 16th, 1878.

## THE NUMERATION OF BLOOD-CORPUSCLES.

*To the Editor of* THE LANCET.

SIR,—Will you kindly permit me, through your columns, to direct the attention of those who may be working with the hæmacytometer to the following solution for making the necessary dilution for counting the corpuscles:—Sulphate of soda, 104 grains; acetic acid, 1 drachm; distilled water, to 4 ounces. I have found it by far the best solution for the purpose, as by it the red corpuscles are rendered uniform in aspect, and the white are very distinctly differentiated.

I am, Sir, your obedient servant,

Queen Anne-street, W. W. R. GOWERS.

## PARIS.

(*From a Correspondent.*)

ON Wednesday last the foundation stone of the future "Ecôle Pratique," or school of Dissection, was laid by M. Bardoux, the Minister of Public Instruction. An elegant tent had been erected over the spot where the ceremony was to take place, which is situated immediately in front of the old Faculty, and with which it was made to communicate by means of a covered passage decorated with hangings of tapestry. The ceremony began at two o'clock by the arrival of the official *cortège*, which was composed of M. Bardoux and all the Professors and Agrégés of the Faculty in their robes, headed by their mace-bearer. The proceedings were opened by M. Vulpian, the doyen, who, in a short address, complimented M. Bardoux on the zeal and goodwill he had shown towards the Faculty. M. Bardoux responded, assuring the Professors that the Government of the Republic was alive to the necessity of providing more ample means for study, and was ready to make large sacrifices for the advancement and dissemination of public instruction. His speech was several times interrupted by applause. A large number of students had collected together to witness the ceremony, and M. Bardoux as also some of the Professors were made the object of an ovation.

Professor Brown-Séquard began his course of lectures on Physiology last Monday at the Collége de France. In his opening address he made known the subject which it was his intention to treat of this year. He proposed to combat all the doctrines which are actually received upon the physiology of the brain, and especially those which have reference to cerebral localisation. He will study the mode of action of the brain upon the spinal cord, and will discuss the question whether it is right to admit the existence of two brains or one only. He will then review all the lesions of the brain which are capable of producing physiological or morbid phenomena. According to Dr. Brown-Séquard, each half of the brain possesses all the functions of the encephalon; it is capable of any act, and can perceive all sensations. He hopes to be able to show that it is not indispensable to admit the theory of the decussation of the nervous fibres of the right side to the left and *vice versâ*, and that each half of the brain is capable of perceiving all sensations emanating from any point of the body. Dr. Brown-Séquard believes in the existence of cerebral localisations, but maintains that the localisations, instead of existing in certain limited points of the brain-substance, are composed of elements disseminated everywhere. He then cited a certain number of facts which would tend to show that the centre of speech is not situated, as Broca has stated, on the posterior part of the third frontal convolution of the left side. The eminent professor has already exposed his views upon this subject in an interesting discussion which took place before the Société de Biologie in 1876. It is not his intention to have recourse to experimentation to demonstrate the truth of his doctrines, but will bring forward pathological facts in support of them.

At the last meeting of the Academy of Medicine, M. Maurice Perrin called the attention of the members to the accidents determined by the use of adulterated chloroform. He remarked that this agent of anæsthesia was much less to be relied upon than in former years, and this was probably due to the fact that the tax upon alcohol had been considerably augmented some few years ago. He had observed that it was now sometimes necessary to submit the patients to inhalation for twenty or thirty minutes in order to obtain the effects, whereas before five to six minutes generally sufficed. Indeed, in some cases he had not been able to obtain anæsthesia at all, and that with chloroform taken from private pharmacies. He also remarked that before it was an exceptional occurrence to have vomiting, but that now it was the rule. Finally, he had seen two cases where death was very nearly the result of the administration of adulterated chloroform. He had tested several samples of chloroform, and in each case had discovered the mahogany-red tint, which is the characteristic of the impure agent. When he had these purified, he did not meet with any of the accidents which he had spoken of.

A work was presented by Dr. Gaillard to the Société de Chirurgie upon the "Spontaneous Cure of Hydrocele in very young Patients." The greater number of the members who took part in the discussion were of opinion that it was not advisable to operate on children under three years of age, and were universal in condemning the use of the seton as liable to produce peritonitis.

Paris, Dec. 16th, 1878.

## PARLIAMENTARY PROCEEDINGS.

### HOUSE OF COMMONS.

*Thursday, Dec. 12th.*

#### THE ARMY MEDICAL DEPARTMENT.

In reply to Dr. Playfair and Mr. Errington,

Colonel STANLEY said it was true that a committee of the War Office on the Army Medical Department had recommended that open competition for appointments of medical officers should be discontinued, and that a system of nomination should be substituted. Each nomination was to be, however, from the Medical School. He had no objection to lay the report of the committee and the reply thereto of the Board of Examiners on the table of the House, but as the document was marked "Confidential" he should require to communicate with the Board. He had no doubt he should be able to place the papers on the table without delay.

In answer to Major O'Beirne,

Mr. E. STANHOPE said,—I am informed that the Government of India have never required officers coming to England on sick leave to appear before a Medical Board on arrival. Accordingly expenses incurred by such officers under other than Indian regulations and for other than Indian regiments have not been admitted as a proper charge against Indian revenues. The War Office regulation to which the hon. member refers has been abolished as regards India and the colonies.

*Friday, Dec. 13th.*

#### THE LUNACY LAWS.

Mr. P. TAYLOR asked whether it was the intention of the Home Secretary to introduce this session a measure for the reform of the Lunacy Laws.

Mr. CROSS said the report of the committee which had sat on this subject was at the present moment engaging the earnest attention of the Lord Chancellor, and as soon as the House re-assembled after the recess the course it was intended to pursue would be stated, and probably legislation would follow.

*Tuesday, Dec. 17th.*

THE MEDICAL ACT, 1858.

In answer to Mr. Arthur Mills,

Lord GEORGE HAMILTON said,—We hope to be able to introduce and pass this session a measure amending the Medical Act of 1858. The constitution of the Medical Council is a matter of considerable difficulty and importance, in respect to which we think further inquiry is necessary before any legislation could be attempted.

# Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen have been admitted Licentiates of the College :—

Courtenay, John Hoysted, Richmond-terrace, Clapham-road.
Dennis, George William Patrick, Claremont-square.
Gill, John Wallis, St. Bartholomew's Hospital
Hallsworth, Francis Arthur, Claremont-square.
Leak, Hector, Royal Infirmary, Manchester.
Le Cronier, Hardwick, St. Heliers, Jersey.
McCausland, Albert Stanley, Glo'ster-place, Lancaster-gate.
Messum, Gordon Bonnington Willie, Guy's Hospital.
Morley, Edward John, Merrick-square.
Shann, William Arthur, Halsey-street.
Wickers, Henry Adolphus, Charing-cross Hospital.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Dec. 12th :—

Davy, David Henry, Oakleigh-park.
Dismorr, Henry, Gravesend.
Sanctuary, Thomas, Hayle, Cornwall.
Warner, James, Bonner's-road, Victoria-park.
Waghorn, James, Redhill, Reigate.

The following gentleman on the same day passed the Primary Professional Examination :—

Baker, William James, St. Bartholomew's Hospital.

COLLEGE OF PHYSICIANS IN IRELAND.—At the December examinations the following obtained the licences in Medicine and Midwifery :—

MEDICINE.—James Clement Baxter, Edward Butt, Anna Dahms, James Patrick Fennell, Robert Gordon, Andrew John Horne, Edw. Laurence M'Ardle, Edward Patrick M'Donnell, John Ernest James Moffitt, Archibald J. Nicolls, Patrick Matthias Poett, Thomas Wm. Smartt, Wm. Joseph Volatti, Joseph Woolstencroft.

MIDWIFERY.—Anna Dahms, James P. Fennell, Andrew John Horne, Edward P. M'Donnell, Isaac Crawford M'Leam, John Ernest James Moffitt, Archibald John Nicolls, Daniel Roderick O'Connor, Patrick Matthias Poett, Thomas Wm. Smartt, Joseph Woolstencroft.

A CENTENARIAN.—Last week, a woman, by name Morrissey, died at Knocklofty, Tipperary, at the advanced age of 105 years.

VACCINATION GRANT.—Mr. William Yates, Richmond, Surrey, has received a Government grant of £29 3*s.* for successful vaccination in his district (second time).

A MEETING of representatives of Friendly Societies has been held at Swansea, at which, after a long discussion, a resolution was unanimously passed in favour of the establishment of a Medical Aid Association, and a committee was appointed to carry it out.

THE Public Health Committee of the Corporation of Dublin have recommended that the offices of Superintendent Medical Officer and Medical Officer of Health for that city should be amalgamated. Dr. Mapother, it is suggested, should retire on a superannuation of £120 a year, and Dr. Cameron be appointed to the joint office at a salary of £400 per annum.

ULSTER MEDICAL SOCIETY.—The following have been elected office-bearers for the current session :—President : Alexander Harkin. Vice-Presidents : W. McKeown, J. W. Browne. Council : Thomas J. Wheeler, James Cuming, John Fagan, J. Smith, Richard Anderson, John Moore. Treasurer : Robert Esler. Librarians : Wm. Scott Core, Henry O'Neill. Pathological Secretary : Charles Workman. Honorary Secretary : William Whitla.

ANDERSON'S COLLEGE, GLASGOW.—The following gentlemen have been successful in the competitive examinations for the Medical Scholarships at the School :—£10 bursary, tenable for two years, for students entering on their second year : G. W. Till, Worcester. £20 bursary, for third-year students : David Carruthers, Dumfriesshire. The Dr. B. Ward Richardson prize of £10, "On the Chemistry of the Urine," has been awarded to Dr. S. Wellesley Coombs, Worcester.

PATHOLOGICAL SOCIETY OF DUBLIN.—The following office-bearers have been elected for the ensuing year :—President : William Moore. Vice-Presidents : John Thos. Banks, Samuel Gordon, Thomas Hayden, Henry Haswell Head, George Kidd, Joliffe Tufnell. Council : A. H. Corley, George F. Duffey, Charles E. Fitzgerald, Arthur Foot, Edward Hamilton, James Little, Thomas E. Little, Robert M'Donnell, Benjamin G. M'Dowell, John Moore, J. M. Purser, Wm. Stokes. Secretary and Treasurer : E. H. Bennett. Secretary for Foreign Correspondence : Robert D. Lyons.

# Births, Marriages, and Deaths.

## BIRTHS.

BRUCE.—On the 14th inst., at Cheltenham, the wife of Lewis Stanhope Bruce, M.R.C.S.E., Surgeon-Major, Bombay Army, of a daughter.

DARKE.—On the 11th inst., at Salisbury, the wife of Fitz-Roy Philip Darke, M.R.C.S.E., of a son.

DOUGLAS.—On the 11th inst., at Bournemouth, the wife of Justyn G. D. Douglas, M.D., of a son.

EASTON.—On the 15th inst., at Norfolk-crescent, Hyde-park, the wife of John Easton, M.D., of a son.

SELLON.—On the 19th ult., at Grays, Essex, the wife of John W. G. Sellon, L.R.C.P.L., of a son.

## MARRIAGES.

GREENWOOD—BLACKMAN.—On the 10th inst., at St. Saviour's, South Hempstead, Thomas Porter Greenwood, M.R.C.S.E., to Jessie, daughter of George Blackman, Esq.

STOCKER—PHILLIPS.—On the 14th inst., at St. Saviour's, South Hampstead, by the Right Rev. Dr. Stanton, Bishop of North Queensland, assisted by the Rev. Gerrard Hecklots, Vicar, Ch. J. Stocker, L.R.C.P.L., &c. &c., of Hampton House, Upton-lane, Stratford, only son of James Stocker, Esq., of Globe House, Stratford, to Emma Harriett, second daughter of Simon Phillips, Esq., of Glenhurst, South Hampstead.

## DEATHS.

BELL.—On the 12th inst., at Eastgate, Rochester, William Bell, F.R.C.S.E., aged 75.

BLAKISTON.—On the 17th inst., at Harley-street, the Rev. Peyton Blakiston, M.D., aged 77.

CRIBB.—On the 11th inst., at Marquis-road, Kentish-town, John Cribb, Surgeon, aged 72.

DAVIES.—On the 11th inst., at Edgbaston, Birmingham, John Birt Davies, M.D., aged 79.

EVANS.—On the 15th inst., at Heyworth-street, Liverpool, Thomas Walter Evans, M.R.C.S.E., aged 31.

GORDON.—On the 10th inst., at Farnworth-street, Liverpool, George Hamilton Gordon, M.R.C.S.E., aged 63.

HUNT.—On the 14th inst., at Tivoli, Cheltenham, William Henry Hunt, M.R.C.S.E., aged 87.

MCLANNAHAN.—On the 5th inst., at Dalrymple, Ayrshire, John McLannahan, L.F.P.S.G., aged 75.

M'TYER.—On the 11th inst., at Redbrae, Maybole, Ayrshire, William M'Tyer, M.D. Friends will please accept of this intimation.

PINCHIN.—On the 14th inst., at Riversdale, Egremont, Cheshire, George Wallis Pinchin, L.K.Q.C.P.I., aged 63.

ROBERTSON.—On the 15th inst., at Blacket-place, Edinburgh, James Robertson, L.R.C.S.Ed., aged 79.

THOMSON.—On the 14th inst., at Inveresk, Musselburgh, Thomas Thomson, F.R.C.S.Ed.

WESTLAKE.—On the 6th inst., at Coat, Somersetshire, Thomas Westlake, M.R.C.S.E., of Red Lion-square, and Surbiton, aged 77.

WINSHIP.—On the 15th inst., at Penton-place, Newington, William Lionel Winship, L.R.C.P.L., of Newcastle-upon-Tyne, aged 28.

**N.B.**—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*

## BOOKS ETC. RECEIVED.

Dr. I. A. Wegg : Personal Protection against Yellow Fever.
Dr. G. Behrend : Die Hautkrankheiten für Aerzte und Studirende.
Dr. S. Ringer : Handbook of Therapeutics.
Dr. B. A. Witthaus : Essentials of Chemistry.
Dr. Tanner and Dr. Meadows : The Diseases of Infancy and Childhood.
Silverlock's Medical Practitioner's Visiting Lists. 1879.
The Cosmopolitan Masonic Calendar. 1879.

# CONTRIBUTORS TO THE LANCET FOR 1879.

Mr. J. E. ADAMS, F.R.C.S., Surgeon to the London Hospital; Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields.

Sir JAMES ALDERSON, Consulting Physician to St. Mary's Hospital.

Dr. ALLCHIN, Physician to the Westminster Hospital; Lecturer on Practical Physiology, Histology, and Pathology, Westminster Hospital Medical School.

Dr. ADAM, Medical Officer to the Boston Cottage Hospital.

Dr. ALEXANDER, Senior Physician to the Bradford Infirmary, and the New Fever Hospital.

Dr. W. ALEXANDER, Senior Physician to the Halifax Infirmary.

Dr. ALLBUTT, Physician to the Leeds General Infirmary, Leeds Dispensary, and Leeds Fever Hospital.

Dr. ANDERSON, Medical Officer to the York Eye Institution; Surgeon to the North-Eastern and Great Northern Railway Companies.

Dr. ANDERSON, Chapel-en-le-Frith, Derbyshire.

Dr. ANDREW, Surgeon to the Shropshire Eye and Ear Hospital, and to the Shrewsbury Royal Grammar School.

Mr. ANGOVE, Medical Officer of Health and Public Vaccinator, Camborne.

Mr. ANNINGSON, Burnley, Lancashire.

Dr. ARNISON, Surgeon to the Newcastle Infirmary; Provincial Medical Officer to the General Post Office.

Mr. ASPLAND, F.R.C.S., Consulting Surgeon to the Ashton-under-Lyne Infirmary; Surgeon to the 4th Batt. Cheshire Rifle Volunteers.

Dr. ALLAN, Superintendent and Physician to the Belvedere Fever Hospital, Glasgow.

Dr. McCALL ANDERSON, Professor of Clinical Medicine at the University of Glasgow; Physician to the Glasgow Western Infirmary; Consulting Physician to the Deaf and Dumb Institution, Glasgow.

Mr. ANNANDALE, F.R.C.S., Surgeon to the Edinburgh Royal Infirmary.

Dr. ATTHILL, Consulting Obstetric Physician to the Adelaide Hospital, Dublin.

Mr. BADER, Ophthalmic Surgeon and Lecturer on Diseases of the Eye, Guy's Hospital.

Mr. WM. MORRANT BAKER, F.R.C.S., Assistant-Surgeon and Lecturer on Physiology, St. Bartholomew's Hospital; Surgeon to the Evelina Hospital for Sick Children.

Mr. BARKER, Assistant-Surgeon to University College Hospital.

Dr. T. BARLOW, Assistant-Physician to the London Hospital, and Hospital for Sick Children, Great Ormond-street.

Mr. R. BARWELL, F.R.C.S., Surgeon to Charing-cross Hospital; Surgeon to the Industrial Home for Crippled Boys, and to Cripples' Home for Girls.

Mr. BARROW, F.R.C.S., London.

Dr. BASTIAN, Professor of Pathological Anatomy, University College; Physician to University College Hospital; Physician to the National Hospital for the Paralysed and Epileptic.

Dr. BAXTER, Senior Physician to the Evelina Hospital for Sick Children; Assistant-Physician to King's College Hospital.

Mr. BELL, F.R.C.S., Surgeon to King's College Hospital.

Mr. BELLAMY, F.R.C.S., Senior Assistant-Surgeon, Lecturer on Anatomy, and Teacher of Operative Surgery to Charing-cross Hospital; Professor of Artistic Anatomy in the Science and Art Department, South Kensington.

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Dr. PALFREY, Senior Obstetric Physician and Lecturer on Midwifery and Diseases of Women to the London Hospital; Senior Physician to the General Lying-in Hospital.
Dr. PAVY, Physician and Lecturer on Medicine to Guy's Hospital.
Mr. PEPPER, F.R.C.S., Surgical Registrar and Demonstrator in Practical Surgery to University College Hospital.
Mr. PICK, F.R.C.S., Assistant-Surgeon and Lecturer on Anatomy to St. George's Hospital; Surgeon to the Atkinson-Morley Hospital.
Dr. PLAYFAIR, Physician for Diseases of Women and Children to King's College Hospital; Consulting Physician to St. Saviour's Hospital.

Dr. POLLOCK, Senior Physician to the Hospital for Consumption, Brompton.

Dr. POTTER, Obstetric Physician to the Westminster Hospital; Lecturer on Midwifery and Diseases of Women at the Westminster Hospital Medical School.

Dr. POORE, Assistant-Physician to University College Hospital; Physician to Royal Infirmary for Sick Children and Women, Waterloo-road.

Dr. POWELL, Physician to the Brompton Consumption Hospital and Eastbourne Convalescent Hospital.

Mr. POWER, M.B., Senior Ophthalmic Surgeon and Lecturer on Ophthalmic Surgery to St. Bartholomew's Hospital; Surgeon to the Royal Westminster Ophthalmic Hospital.

Dr. PRITCHARD, Aural Surgeon to King's College Hospital; Surgeon to the Royal Dispensary for Diseases of the Ear.

Dr. PURVES, Aural Surgeon to Guy's Hospital.

Dr. PADLEY, Senior Physician to the Swansea Hospital.

Dr. PAGET, Physician to Addenbrooke's Hospital, Cambridge.

Mr. J. H. PALMER, Birmingham.

Mr. PARKER, F.R.C.S., Pathologist to the Royal Infirmary, Liverpool; Surgeon to the Stanley Hospital.

Mr. PARSONS, Surgeon to the Dawlish Cottage Hospital.

Mr. O. PEMBERTON, F.R.C.S., Surgeon to the Birmingham General Hospital.

Mr. PENFOLD, Senior Surgeon to the Sussex and Brighton Infirmary for Diseases of the Eye, Brighton.

Dr. PHILIPSON, Physician to the Newcastle-on-Tyne Infirmary.

Dr. PHILLIPS, Reading.

Dr. F. M. PIERCE, Manchester.

Dr. F. POLLARD, Assistant-Physician to the Liverpool Infirmary for Children.

Mr. W. POWELL, Surgeon to the Bromyard Cottage Hospital.

Dr. W. PRATT, Surgeon to the Montgomeryshire Infirmary.

Mr. PUZEY, Honorary Surgeon to the Liverpool Northern Hospital.

Dr. POPHAM, Physician to the North Infirmary, Dublin.

Dr. PUREFOY, Obstetric Physician to the Adelaide Hospital, Dublin.

Dr. QUINLAN, Physician to St. Vincent's Hospital, Dublin.

Dr. RALFE, Physician to the Seamen's Hospital, Greenwich.

Dr. RAMSKILL, Senior Physician to the Hospital for the Paralysed and Epileptic.

Dr. RINGER, Professor of Materia Medica at University College; Physician to, and Professor of Clinical Medicine at, University College Hospital.

Mr. RIVINGTON, F.R.C.S., Surgeon to the London Hospital.

Dr. F. T. ROBERTS, Assistant-Physician to, and Assistant Professor of Clinical Medicine at, University College Hospital; Assistant-Physician to the Brompton Consumption Hospital.

Mr. ROBERTS, F.R.C.S., London.

Dr. M. J. RAE, Physician to the Blackburn and East Lancashire Infirmary.

Dr. RAWDON, Honorary Surgeon to the Liverpool Infirmary for Children; Honorary Medical Officer to the Liverpool Bluecoat Hospital.

Dr. RICHARDSON, Rusholme, Manchester.

Dr. RIDPATH, Medical Officer to the Driffield Cottage Hospital.

Mr. ROBERTS, Uxbridge.

Dr. ROSE, Resident Surgeon to the Chesterfield and North Derbyshire Hospital.

Mr. RUCKLEY, Medical Officer to the High Wycombe Cottage Hospital.

Dr. RUSSELL, Physician to the Birmingham General Hospital.

Dr. RUSSELL, Lancaster.

Mr. RENTON, M.B., Assistant-Surgeon to the Glasgow Eye Infirmary.

Dr. RAINSFORD, Senior Surgeon to St. Mark's Ophthalmic Hospital; Aural Surgeon to the Adelaide Hospital, Dublin.

Mr. ROSS, Physician to the County Fever Hospital, Monaghan; Medical Officer to the Monaghan Union Infirmary and Fever Hospital.

Dr. SANSOM, Senior Physician to the North-Eastern Hospital for Children; Assistant-Physician to the London Hospital.

Dr. SHARKEY, Resident Assistant-Physician to St. Thomas's Hospital.

Dr. A. B. SHEPHERD, Assistant-Physician to St. Mary's Hospital; Physician to the City of London Hospital for Diseases of the Chest, Victoria-park.

Mr. H. SMITH, F.R.C.S., Professor of Surgery to King's College; Surgeon to King's College Hospital.

Mr. T. SMITH, F.R.C.S., Surgeon to St. Bartholomew's Hospital, and Lecturer on Anatomy at the Medical School; Surgeon to the Children's Hospital, Great Ormond-street; Examiner in Surgery to the Royal College of Physicians of London.

Dr. SOUTHEY, Physician to, and Lecturer on Forensic Medicine and Hygiene at, St. Bartholomew's Hospital.

Dr. STURGES, Physician to, and Lecturer on Medicine at, Westminster Hospital; Assistant-Physician to the Hospital for Sick Children, Great Ormond-street.

Mr. SAVORY, F.R.C.S., Surgeon and Lecturer on Surgery to St. Bartholomew's Hospital.

Dr. M. T. SADLER, Honorary Surgeon to the Beckett Hospital and Dispensary, Barnsley.

Dr. T. SAVAGE, Senior Surgeon to the Birmingham and Midland Hospital for Women.

Dr. J. SAWYER, Physician to the Queen's Hospital; Consulting Physician to the Birmingham Dental Hospital.

Dr. E. SEATON, Nottingham.

Dr. SHAPTER, Physician to the Devon and Exeter Hospital; Consulting Physician to Wonford House Hospital for the Insane.

Mr. E. SHARP, Surgeon to the Royal Cornwall Infirmary, Truro.

Mr. SHEAF, F.R.C.S., Honorary Surgeon to North Lonsdale Hospital Barrow-in-Furness.

Dr. SHEARER, Liverpool.

Dr. SHEEN, Surgeon to the Cardiff Infirmary.

Mr. SHELDON, Honorary Surgeon to the Stanley Hospital, Liverpool.

Mr. G. A. SHEPPARD, Surgeon to the Worcester Infirmary.

Dr. SHUTTLEWORTH, Lancaster.

Dr. SIMONS, Luton.

Dr. W. J. SINCLAIR, Honorary Physician to the Manchester Southern Hospital for Diseases of Women and Children.

Dr. SKERRITT, Physician to the Bristol General Hospital.

Mr. SLEIGHTHOLME, House-Surgeon to the North Ormesby Cottage Hospital.

Dr. F. P. SMITH, Physician to the Shepton-Mallet Hospital.

Mr. SMITH, Surgeon to the Halifax Infirmary; Medical Referee to the Ventnor Consumption Hospital.

Mr. H. N. SMITH, House-Surgeon to the Sussex County Hospital.

Dr. R. S. SMITH, Physician to the Bristol Royal Infirmary.

Mr. S. SNELL, Ophthalmic Surgeon to the Sheffield General Infirmary.

Dr. J. B. SPENCE, Redhill, Surrey.

Dr. W. H. SPENCER, Physician to the Bristol Royal Infirmary.

Dr. SPENDER, Surgeon to the Mineral Water Hospital, Bath.

Mr. SPROULE, Frome, Somerset.

Dr. J. STEPHENS, Brighton.

Mr. W. STEWART, Honorary Surgeon to the Beckett Hospital and Dispensary, Barnsley.

Dr. STEEL, Abergavenny.

Mr. STEELE, F.R.C.S., Surgeon to the Bristol Royal Infirmary.

Dr. W. STRANGE, Senior Physician to the Worcester Infirmary.

Mr. C. R. STRATON, Wilton, Salisbury.

Dr. J. SUTHERLAND, Honorary Surgeon to the Ardwick and Ancoats Hospital and Dispensary, Beswick, Manchester.

Mr. SWABY-SMITH, Honorary Surgeon to the Bootle Boro' Hospital, Liverpool.

Mr. W. P. SWAIN, F.R.C.S., Surgeon to the Royal Albert Hospital and Eye Infirmary, Devonport.

Mr. SYMPSON, F.R.C.S., Surgeon to the Lincoln County Hospital, City Gaol, General Dispensary and Lunatic Hospital.

Dr. STEPHENSON, Aberdeen.

Dr. STIRLING, Visiting Medical Officer to the County and City of Perth Infirmary.

Dr. STRUTHERS, Professor of Anatomy at the University of Aberdeen.

Dr. SPEARING, Antrim.

Dr. STOKES, Surgeon to the Richmond Surgical Hospital.

Dr. F. T. TAYLOR, London.

Dr. SYMES THOMPSON, Physician to the Consumption Hospital Brompton.

Mr. TWEEDY, F.R.C.S., Clinical Assistant to the Royal London Ophthalmic Hospital.

Mr. TAIT, F.R.C.S., Surgeon to the Birmingham and Midland Hospital for Women.

Dr. C. B. TAYLOR, Honorary Surgeon to the Nottingham and Midland Eye Infirmary.

Dr. J. W. TAYLOR, Birmingham.

Dr. R. H. TAYLOR, Senior Consulting Surgeon to the Eye and Ear Infirmary, Liverpool.
Mr. T. P. TEALE, M.B., Surgeon to the Leeds General Infirmary.
Mr. L. THOMAS, Brynhyfryd, Amlwch, Anglesey.
Dr. J. R. THOMSON, Bournemouth.
Dr. W. THOMSON, Consulting Surgeon to the Peterborough Infirmary.
Mr. W. A. U. THOMSON, Wembly, Sudbury.
Dr. THORNLEY, Halifax, Yorkshire.
Dr. E. T. TIBBITS, Physician to the Bradford Infirmary, and to the Fever Hospital.
Dr. TOMKINS, House-Physician to the Royal Infirmary, Manchester.
Mr. TRUMAN, New Basford, Nottingham.
Mr. TUCK, Surgeon to the Seaford Convalescent Hospital.
Dr. TUCKWELL, Physician to the Radcliffe Infirmary, Oxford.
Mr. TUDOR, Senior Surgeon to the Dorset County Hospital.
Mr. TYRRELL, Surgeon to the Malvern Rural Hospital.
Mr. TYSON, F.R.C.S., Folkestone.
Dr. TUKE, Edinburgh.
Mr. THOMPSON, M.B., Surgeon to the Tyrone County Infirmary and Gaol, Omagh.
Dr. TYRRELL, Senior Surgeon to the Mater Misericordiæ Hospital, Dublin; Professor of Surgery in the Catholic University.

Dr. T. UNDERHILL, Honorary Medical Officer to the Guest Hospital, Dudley, West Bromwich.

Mr. VACHER, Physician to the Birkenhead Fever Hospital.
Mr. VEITCH, Surgeon to the Middlesborough Cottage Hospital.
Mr. VINCENT, East Dereham.

Mr. HAYNES WALTON, Surgeon to the Central London Ophthalmic Hospital; Surgeon to St. Mary's Hospital.
Dr. SOELBERG WELLS, Professor of Ophthalmology at King's College; Ophthalmic Surgeon to King's College Hospital; Surgeon to the Royal London Ophthalmic Hospital; Consulting Surgeon to the Shropshire Eye and Ear Hospital.
Dr. WHIPHAM, Physician to, and Lecturer on Botany and Physics in charge of the Department for Diseases of the Throat at, St. George's Hospital.
Dr. J. WILLIAMS, Consulting Physician to the Royal Infirmary for Women and Children; Assistant Obstetric Physician to University College Hospital.
Dr. WILTSHIRE, Joint Lecturer on Midwifery at, and Assistant-Physician-Accoucheur to, St. Mary's Hospital; Physician for Diseases of Women to the West London Hospital.
Mr. J. WOOD, F.R.C.S., Senior Surgeon to King's College Hospital; Professor of Clinical Surgery at King's College; Examiner in Anatomy and Physiology to the Royal College of Surgeons.
Mr. WICKERS, House-Surgeon to the Charing-cross Hospital.
Dr. WILLIAMS, Classical Exhib., St. Thomas's Hospital.
Mr. W. WALKER, Coatham, Redcar.
Mr. WALKER, Spondon, Derby.
Mr. T. W. WALSH, F.R.C.S., Surgeon to the Worcester General Infirmary.
Dr. WARDELL, Senior Physician to the Tunbridge Wells Infirmary.
Dr. WARDEN, Senior Honorary Surgeon to the Birmingham Ear and Throat Infirmary, and Birmingham and Midland Counties Orthopædic Hospital.
Dr. WATERS, Consulting Physician to the Chester General Infirmary.
Dr. W. T. WATSON, Tottenham.
Mr. WEARNE, Helston, Cornwall.
Dr. W. WEBB, Senior Medical Officer to the Wirksworth Cottage Hospital.
Mr. T. WEBSTER, Redland, Bristol.
Mr. R. E. WEST, Tavistock, Devon.
Mr. WHITE, M.B., Resident Surgeon to the Infirmary, Aston-under-Lyne.
Dr. WHITBY, Ottery-St.-Mary, Devon.
Dr. WYLIE, Skipton, Yorkshire.
Mr. WIBLIN, F.R.C.S., Southampton.
Mr. C. WILLIAMS, F.R.C.S., Assistant-Surgeon to the Norfolk and Norwich Hospital.
Mr. T. W. WILLIAMS, F.R.C.S., Surgeon to the Birmingham Orthopædic Hospital.
Mr. WILLIS, Surgeon to the Monmouth Hospital.
Mr. G. F. WILLS, Senior Surgeon to the Crewkerne Hospital.
Mr. T. M. WILLS, Honorary Surgeon to the Bootle Borough Hospital, Liverpool.
Dr. A. C. WILSON, Honorary Surgeon to the Doncaster Infirmary and Dispensary.
Dr. E. T. WILSON, Physician to the Cheltenham General Hospital.
Mr. WITHINGTON, Doncaster.
Mr. R. A. H. WOOD, Honorary Surgeon to the Ladies' Charity and Lying-in Hospital.
Mr. G. A. WOODS, Honorary Surgeon to the Southport Infirmary and Dispensary.
Dr. W. WOODWARD, Worcester.
Mr. F. S. WORTHINGTON, Surgeon to the Lowestoft Convalescent Hospital.
Dr. J. WYBRANTS, Honorary Consulting Physician to the Shepton-Mallet Hospital.
Dr. E. WATSON, Surgeon to, and Lecturer on Clinical Surgery at, the Glasgow Royal Infirmary.
Dr. P. H. WATSON, Senior Surgeon to the Royal Infirmary, Edinburgh.
Dr. WHITAKER, Glasgow.
Dr. WILL, Surgeon to, and Lecturer on Clinical Surgery at, the Aberdeen Royal Infirmary.
Dr. WOLFE, Lecturer on Ophthalmic Medicine and Surgery at Anderson's University.
Mr. WHITE, Surgeon to the Meath Hospital and County Dublin Infirmary.
Dr. WRIGHT, Trinity College, Dublin.

Dr. BURNEY YEO, Physician to King's College Hospital; Assistant-Physician to the Brompton Hospital for Diseases of the Chest.
Dr. W. YEATS, Surgeon to the Ardwick and Ancoats Hospital and Dispensary, Manchester.
Dr. YELD, Physician to the Sunderland Corporation Hospital.

Mr. CULLIMORE, Surgeon, Madras Army.
Dr. LUCAS, Surgeon-Major, Bombay Army.
Mr. OUGHTON, Surgeon-Major, Army.
Mr. STEWART, M.B., Surgeon, Bombay Army.

Dr. BROWN-SEQUARD, Professor of Medicine to the University of France.
Dr. BACCELI, Rome.
Professor CHARCOT, Physician to the Salpêtrière Hospital, Professor at the Paris School of Medicine.
Dr. C. CAMPBELL, Paris.
Dr. CHANTREUIL, Head of the Clinique of the Lying-in Hospital of the Paris School of Medicine.
Dr. NOEL GUENEAU DE MUSSY, Physician to the Hôtel Dieu.
Dr. DIEULAFOY, Physician to the Paris Hospitals.
Dr. DONNET, Lanonaille.
Dr. GALEZOWSKI, the well-known Paris Ophthalmologist.
Dr. J. GERSON DA CUNHA, Bombay.
Dr. GOMBAULT, Physician to the Paris Hospitals.
Professor GUBLER, Physician to Reunion Hospital, Professor of Therapeutics at the Paris School of Medicine.
Dr. ALPHONSE GUERIN, Surgeon to the Hôtel Dieu.
Dr. GUSSEROW, Professor of Midwifery in the University of Berlin.
Dr. LEON LABBE, Surgeon to Lariboisière Hospital; Vice-Professor at the Paris School of Medicine.
Dr. LEGRAND, Physician to the Mineral Water Station of Aix les Bains.
Dr. LEUDET, Physician to the Mineral Water Station of les Eaux Bonnes.
Mr. D. L. MACKENZIE, Old Calabar, West Africa.
Dr. J. F. MILLER, Paris.
Dr. ONIMUS, Paris.
Professor ORE, Physician to the Hôpital St. André; Professor at the Bordeaux School of Medicine.
Dr. PANAS, Surgeon to Lariboisière Hospital.
Dr. PEAN, Surgeon to St. Louis Hospital.
Professor PETER, Physician to the Paris Hospitals; Professor at the Paris School of Medicine.
Professor POTAIN, Physician to the Hôpital Necker; Professor at the Paris School of Medicine.
Dr. PROUST, Physician to the Hôpital St. Louis.
Professor SPIEGELBERG, Breslau.
Dr. J. P. STEELE, Rome.
Dr. JULES WORMS, Physician to Rothschild's Paris Hospital.

# Notes, Short Comments, and Answers to Correspondents.

### DEATH REGISTRATION.

THE medical officers of the South Dublin Union Workhouse having failed to supply the Registrar-General for Ireland with the weekly returns of deaths in the workhouse hospital, the matter has been brought under the notice of the Local Government Board, who have intimated that the punctual performance of this duty will be strictly required. In many instances the cause of death was returned by the medical officers as "unknown," but it is satisfactory to find that the South Dublin Union appears to be the only case in which the slightest difficulty is experienced in supplying these returns for registration purposes.

*B. F. L.*—We are not aware. The inquiry might be addressed to the secretaries of the hospitals.

*Mr. Wm. Frost.*—No. We do not know it.

### DETACHMENT OF RETINA.

*To the Editor of* THE LANCET.

SIR,—I am somewhat surprised that Dr. Wolfe, being a German, requires from me other authority than that of Sichel before he is willing to cease to call the operation of incision of the sclera for the cure of detached retina his own. If he will refer to the *Centralblatt für praktische Augenheilkunde*, of Dec. 1877, he will find there an article by Dr. Pufahl, which gives an account of two cases in which Dr. Hirschberg, of Berlin, performed this operation in the year 1877. The article, after criticising the operation of von Wecker, runs thus when translated:—"We gladly hail the return by Professor Alfred Graefe, of Halle, to the old and simple scleral puncture for the cure of detached retina, as recommended by Kittel and Arlt *more than twenty years ago*. His results in four cases are extremely encouraging. True to the old saying, 'Simplex veri sigillum,' Dr. Hirschberg resolved in proper cases to follow this suggestion." Dr. Pufahl then goes on to describe Graefe's operation, and, in order to avoid all misconception, I will give this, and Dr. Wolfe's account of his own operation side by side.

"Dr. A. Graefe made the scleral puncture with a Graefe knife, the patient sitting on a chair, the lids being held apart by an assistant, and the eye fixed by means of ordinary forceps. A fold of conjunctiva below and in front of the equator being pinched up, the patient was directed to look up as much as possible; the eye was still further rotated upwards with the forceps, and the knife, with its blade parallel to the fibres of the rectus inferior, was thrust in about 1½ mm. or 2 mm. into the space between the rect. ext. and the rect. inf., near the latter. The knife was then turned about 45°, on which a few drops of yellow fluid came out, while at the same time the lower half of the conjunctiva was filled with serous fluid. The bandage was applied, and the patient put to bed."

Dr. Wolfe says: "The patient being put under chloroform, and a speculum introduced, the assistant fixed the eyeball with gutta-percha tipped forceps. I made a vertical slit into the conjunctiva and subjacent tissue, laying bare the sclerotic, below the equator of its anterior aspect. I separated the lips of the wound by two small strabismus hooks, and, the assistant steadily maintaining the position of the eyeball to prevent the exposed portion of sclerotic from shifting, I introduced Wecker's sclerotome, made of nickel-plated German silver, and sharpened at the point only, into the sac formed by the fluid, making the incision through the sclerotic obliquely in such a manner that the edges of the scleral wound should overlap each other when the knife was withdrawn. I then withdrew the knife gently, using at the same time pressure on the eyeball in the track of the receding knife, and a quantity of serum came along with it. To make sure that the whole fluid was evacuated, I used a little more gentle friction and pressure along the course of the wound. I then brought the lips of the external wound together with a fine silk ligature and strapped both eyelids with court plaster."

I should add that to Dr. Wolfe's description is appended a figure showing his incision to have the same position, direction, and length, as that of Professor Graefe.

It will be seen from the above that the only points in which the two operations differ are that Dr. Wolfe uses a Wecker's sclerotome instead of a Graefe knife, that he makes his incision obliquely, and that he puts in a suture. It may well be doubted if any one of these trifling alterations is an improvement.

Notwithstanding the very favourable results of these two cases, so accurately and scientifically recorded, Dr. Pufahl modestly goes on to say, "We are far from drawing from these two cases anything like a general conclusion, as, according to our idea, the operation has not been performed sufficiently long to follow up its results; but these, as far as they go, are very favourable."

In conclusion, I may observe that, with the exception of partial and promissory statements with reference to the ophthalmoscopic appearances, Dr. Wolfe has made no reply to that part of my letter which points out the very important omissions in his report of his single case; and I should venture to recommend to his notice the admirable charts of field and scientific records of vision in Dr. Pufahl's reports.

I am, Sir, your obedient servant,
Moorfields Hospital Museum. W. A. BRAILEY.

*Ratepayer*, who is a medical man, complains of the too (?) prompt action of the chairman of a board of guardians, who of his own impulse, it seems, telegraphed for a trained nurse for a family stricken with fever, and deserted. The complaint is a novel one. We cannot condemn the chairman for thus acting. We wish there were more like him, and we trust the guardians, and the medical officers of the district, will warmly support his generous alacrity to meet the pressing need. Our correspondent asks, "Who is to pay the piper?" We reply, the ratepayers, and they ought to be proud of being so well served by a man in authority. Of course, when the nurse arrived she became the agent of the doctor, simply carrying out his instructions, and in no way acting in his stead.

### FEVER AT CAYTHORPE.

*To the Editor of* THE LANCET.

SIR,—A serious outbreak of typhoid fever and scarlatina has occurred at Caythorpe near this place. The sanitary arrangements are very bad. The wells are polluted with sewage, and the water is highly charged with organic matter. The first case of typhoid occurred on Nov. 13th, the second and third on the 19th, and two more on Dec. 7th, making five, all in the same row of cottages. The cause is easily found in the quality of the drinking-water, and open sewers at the doors of each of the cottages. Of the first cases, one has died (a child aged nine), the other two are convalescent. In addition to this, an outbreak of scarlatina has taken place in the same village—four cases in one house, caused by an abominable cesspool at the rear, and close to the door; one case in the adjoining house, and another caught the disease by merely calling at the house, demonstrating its virulent nature. Some of the cases had slight eruption, others had sore-throat and fever without eruption; not only inflamed and ulcerated tonsils, but the uvula, soft palate, and pharynx, enormously inflamed and swollen. In one case the inflammation extended to the larynx, with loss of voice, and inability to swallow. This case was relieved by blistering the throat. The general treatment was tonic and diaphoretic, mustard externally, astringent gargles of alum and tannin, with inhalation of the steam of hot water; the gargles and medicine being sucked through straws, on the American system, which afforded much relief.

The sanitary officers have endeavoured to have matters rectified, but seem to have little power to enforce their recommendations. Either a public fountain, or pure water-supply is urgently needed, and if the cesspools cannot be removed, there ought to be sifted earth thrown into them weekly, which would absorb the foul gases, and enable the contents to be removed without danger, and furnish a fertilising manure, free from smell. This system has been found to answer in India.

Since I have come to this place I have seen several cases of scarlatina ushered in by convulsions, the rash only appearing a day or two afterwards, and sometimes not at all, merely sore-throat and sinking, with much fever. It seems to me that these are the cases described as diphtheria—viz., scarlatina without eruption. The name diphtheria was imported from France, not the disease, as stated by some writers in the press. When scarlatina is observed in tropical countries, which is seldom, there is very little eruption, and often even that does not appear till the ninth or tenth day, and usually on the abdomen. A similar state of things would therefore be expected in France, which is a warmer and drier country than England. Hence the name "diphthérite," which merely describes a symptom and not the disease itself. If diphtheria is a local disease, why are the constitutional symptoms so severe and fatal? In all the fatal cases, death occurs from sinking, not from obstruction, unless caustics or strong remedies are used.

Croup is caused by sudden changes of temperature, according to my experience; while scarlatina and diphtheria (so-called) are produced by bad drainage or polluted water. Croup is confined to children, while diphtheria and scarlatina attack all ages. I have known three cases of croup occur in one night, and no other case seen for months afterwards.

I am, Sir, your obedient servant,
GEO. K. BARTON, M.D., F.R.C.S.
Fulbeck, Lincolnshire, Dec. 9th, 1878.

*Mr. J. H. R. W. Lucas* (Hull) will find in the "Continental Bradshaw," or in the "Handbook of Italy" of Baedeker or Murray, a list of the English medical men practising in the chief Italian towns. For an Anglo-American *clientèle*, a diploma such as that recognised by the General Medical Council will suffice; while its possessor may also be consulted by patients of other nationalities. Three years, we believe, is the minimum term within which a diploma (not honorary) can be obtained at an Italian medical school. For answers to his other interrogations, our correspondent had better communicate with the English or American Consuls at those Italian towns not already provided with English or American practitioners.

### THE ACTION OF HYOSCYAMINE.

*To the Editor of* THE LANCET.

SIR,—With reference to hyoscyamine, it may be interesting to prescribers to know that it is absolutely necessary to order "Merck's extractive hyoscyamine," if they wish to prescribe the remedy recommended by Dr. Lawson. Having a few weeks ago had occasion to order this remedy, and being anxious that Dr. Lawson's formula should be adhered to, I personally took the prescription to two of our leading London pharmaceutists, and found that in each case only a crystalline form of hyoscyamine (prepared, I think, by Hopkins) was kept in stock. Mr. Prideaux has pointed out in his interesting communication (see THE LANCET, Dec. 14th, 1878), the varying results obtained by the use of varying samples of Merck's extractive; and I would further suggest that some of the discrepant statements as to the action of "hyoscyamine" may be due to the fact that the differences between the crystalline and the amorphous forms have not been sufficiently known to prescribers and dispensers.

I am, Sir, your obedient servant,
Dec. 1878. PSYCHIATROS.